1000 N. MAIN ST. STE, 201 | FUQUAY VARINA, NORTH CAROLINA 27526
PHONE: 843.839.3335 | FAX: 478.737.0959
NC LICENSE #: SP. FA/LV.31726

SUBMITTAL PACKAGE

FIRE ALARM SYSTEM

PROJECT LOCATION:

DUKE ENERGY – MOBILE SUBSTATION

1269 JONESBORO RD

HARNETT COUNTY, N.C., 28334

SALES CONSULTANT:

BRIAN DARRACOTT

TABLE OF CONTENTS		
ITEM #	MODEL #	DESCRIPTION
1	FC922	FIRE ALARM CONTROL PANEL
2	FT2015-U3	ANNUNCIATOR
3	PAD5	POWER SUPPLY
4	XMS-D	PULL STATION
5	OP921	SMOKE DETECTOR / STANDARD BASE
6	DB-11	DETECTOR BASE
7	XTRI-D	DUAL MONITOR MODULE
8	SL2HSCR-F	HONR STROBE – [CEILING MOUNTED]
9	SL2SCR-F	STROBE ONLY – [CEILING MOUNTED]
10	DTK-120SRD	SURGE PROTECTOR – 120VAC
11	DTK-2LVLPF	SURGE PROTECTOR – 24V
12	SSU00674	DOCUMENT BOX
13	PS-12350	RECHARGABLE BATTERY

SIEMENS

Cerberus® PRO

252-Point and 504-Point Addressable Fire Alarm Control Panel

Models FC922 | FC924

Architect & Engineer Specifications

- ☐ Addressable fire alarm control panel (FACP) intended for mid-size building applications
- ☐ Comprised of the following system components:
  - Operating units
  - Periphery boards
  - Power supplies
  - System enclosures 'Walk Test'
- ☐ System features:
  - Supports 252-to-504 addressable devices:
    - One (1) to four (4) 'Class B'; one (1) to two (2) 'Class A' for Model FC922
    - One (1) to eight (8) 'Class B'; one (1) to four (4) 'Class A' for Model FC924
- ☐ 10,000-event history-logging capability
- ☐ Includes one (1) 'Class A' or two (2) 'Class B' notification appliance circuits (NACs)
- ☐ Resettable and non-resettable 24VDC, [nominal] auxiliary power
- ☐ Connectivity to a leased-line / city-tie module
- ☐ Releasing module supports activation of releasing valves in pre-action / deluge systems / agent release
- ☐ Off-normal warning message prior to reset
- ☐ Fast and easy set-up with auto-configuration feature
- ☐ Networkable up to 32 panels using CV Web or up to 16 panels using SafeDLink
- ☐ Cerberus® DMS Danger Management Station can monitor and control up to 32 Models FC922 and FC924 FACPs
- ☐ Supports multiple global displays
- ☐ Digital alarm communication transmitter (DACT)
- ☐ UL 864 10th Edition Listed, ULC-S527 Listed
- ☐ FM, CSFM & NYC Fire Department Approved

Product Overview

The Cerberus PRO 252-point (Model FC922) / 504-point (Model FC924) addressable FACP is designed to meet the fire-protection needs of mid-size buildings. This advanced FACP offers features typically required in mid-size buildings in a package that is easy to install and competitively priced.

Additionally, Models FC922 and FC924 are networkable, allowing the systems to fulfill the growing fire-protection needs of the building. The programming software for the 252/ 504-point fire systems is held in flash electrically erasable programmable read-only memory (EEPROM).

The following Cerberus PRO system components are used in the 252-point / 504-point FACP:

- Operating units
- Periphery boards
- Power supplies
- System enclosures

Other options are available to meet specific needs.

Models FC922 and FC924 are FM (#3010); CSFM(#7165-0067:0259) and FDNY (#6104) Approved.

Model FC922

Specifications

Operating Interface Unit

The Operating Interface Unit (Model FCM2018-U3 or Model FCM2019-U3) functions as the operating interface and central microprocessor for Models FC922 and FC924 with up to 10,000 event history log.

Either operating interface unit provides multi-use capability for each end-user to efficiently 'Acknowledge' events; to quickly control the NACs of the FACP, and to permit a manual reset of the respective system. Detailed data about the nature and location of the events can also be displayed, via a backlit, 2" —x— 4-3/4" (5.1 cm. —x— 12.1 cm.) LCD screen and the four-way navigation push button at the top of the FACP.

Note: For applications in Canada that require a Desigo operating unit with LEDs, Model FCM2035-U3 must be ordered.

Periphery Boards

The periphery boards (Models FCI2016-U1 and FCI2017-U1) serve as the main operating components for the 252 / 504-point FACP. Each module operates and monitors input-device identity; as well as controls the signaling-line circuits that communicate with smoke detectors and other field devices (i.e. –C-NET).

Power Supplies

All functions are supported by the power supplies (Model FP2011-U1 or Model FP2012-U1), which therefore eliminate the need for external power supplies.

Further, the 170-Watt power supply (Model FP2011-U1) and 300-Watt power supply (Model FP2012-U1) provide primary, 24VDC nominal power for normal operation to Models FC922 and FC924. Both power supplies are filtered and regulated. Model FP2011-U1 is rated at 6.5 Amps, and the rating for Model FP2012-U1 is 11.5A.

The 170-Watt power supply incorporates a 4.0A, non-resettable slow-blow fuse on the primary input, and includes a built-in AC-line filter for surge and noise suppression. Model FP2011-U1 mounts in the FACP enclosure, and there are no serviceable Cerberus PRO parts to be maintained.

The 300-Watt power supply incorporates two (2) 6.3A replaceable, non-resettable slow-blow fuses on the primary input and includes a built-in AC line filter for surge and noise suppression. Model FP2012-U1 mounts in the FACP's enclosure, and there are no serviceable Cerberus PRO parts to be maintained.

System Enclosures

The Cerberus PRO fire-alarm enclosures and their accessories provide a complete set of hardware for mounting all Cerberus PRO main-system and remote terminal cards and modules.

The hardware allows this Cerberus PRO system to be configured for a variety of applications, as well as for future system upgrades. Included in the enclosure series are back box and door sets; removable mounting plates and clear lenses, as well as blank plates for use with the enclosure doors.

All enclosures come with ground straps for the inner and outer doors, shield termination lugs, grounding lugs, and tie wrap lances for securing wire. All Cerberus PRO two height-unit (2HU) enclosures can also mount system back-up batteries to 33AH in capacity.

Models FC922 and FC924 utilize a two-height-unit enclosure. The following components comprise a complete two-height-unit enclosure:

- One (1) back box, (Model FHB2002-U1 / R1)
- One (1) or two (2) inner doors, (Models FHD2004-U1 or FHD2005-U1)
- One (1) outer door, (Model FHD2002-U3 / R3 or FHD2003-U3 / R3)
- One (1) or two (2) clear windows, (Model FHD2006-U1)

The approximate size for each two-height-unit enclosure is: 27.5" (70cm.) high; 21.5" (54.6cm.) wide, and 5.75" (14.6cm.) deep. The weight, without any attached components, is approximately 6.3 Lbs. (2858 g).

Note: One (1) window is installed for Model FHD2002-U3 / R3 outer door, and two (2) windows are required for Model FHD2003-U3 / R3

Additionally, the two-height-unit enclosure supports the following optional components:

- Enclosure trim kit (for flush-mounting)
- Battery bracket (to comply with seismic certification)
- DIN rail kit (provides connection between internal-system wiring and field wiring

Optional Accessories

Digital Alarm Communication Transmitter (DACT)

The DACT is used to provide communication between Models FC922 and FC924 and with either a central or remote monitoring station. The Model FCA2015-U1 module mounts directly on the back enclosure and connects to the periphery boards. The DACT enables remote transmission of alarms and events via a public telephone line.

Releasing Module

The releasing module (Model XCI2001-U1) supports activation of releasing valves in pre-action / deluge systems (including double-interlock pre-action systems, or Sinorix® Engineered Fire Suppression systems). Activation can be event-controlled or performed by addressable manual pull stations. The releasing module is installed on the periphery board and supports `Class B' releasing circuits.

When installed on Models FC922 / FC924, the releasing module contains an integral manual-disconnect switch for releasing circuits. This essential feature protects the releasing circuits from accidental discharge during maintenance.

Leased-Line / City-Tie Module

The Leased-Line / City-Tie module (Model FCI2020-U1) is used as an optional module, providing a local-energy output for municipal call-box connection.
Model FCI2020-U1 also gives a reverse-polarity output for leased-line connection. Model FCI2020-U1 is installed on the periphery board for Models FC2025 and FC2050 FACPs.
When used for connection to a municipal call box, the city-tie function supports Alarm-event transmission. When used for leased-line connection, the module supports two (2) leased telephone lines for transmitting *Alarm, Trouble* and *Supervisory* events.

Battery Disconnect Module

The Battery Disconnect Module (Model FCA2032-U1)is specifically designed to disconnect the backup battery on the Cerberus PRO 252 / 504-point addressable FACP when its voltage drops below 19VDC. Model FCA2032-U1's cut-off capability prevents the battery from operating beyond its normal power level for basic system operation.

Hardware Migration Kit

The Cerberus PRO 922/924 panel offers support for Siemens legacy addressable and conventional systems. Model FHA2056-series kits are specifically designed for the seamless transition of an existing Siemens FS-250 (FireSeeker) or MPC6000 control panel into a fully operational 50 | 252 or 504-point addressable Cerberus PRO fire-alarm FACP, [FC901 | FC922 or FC924], respectively.
Each shipment of the Model FHA2056-series kits contains the following pieces of equipment:

- One (1) outer door
- One (1) inner door
- One (1) hinge-assembly bracket
- One (1) back plate
- One (1) inner-door bracket

NOTE: The five (5) items that comprise one (1) Model FHA2056-series hardware-migration kit cannot be ordered individually.

Model FHA-MIQKIT-04/-05 offers support for legacy MXL and MXL-IQ peripherals using the FCL2004 device interface module.

Specifications (cont.)

Hardware Migration Kit (cont.)

This allows the user to configure a Cerberus PRO panel to communicate to older addressable devices, offering a seamless migration solution to the latest technology system.

Network Module

The C-WEB network module (Model FN2001-U1) is used to network up to 16 FACPs, or one (1) fire terminal, via the C-NET system bus.

Model FN2001-U1 is plugged into the Operating Units (Models FCM2018-U3 /R3 and FCM2019-U3 /R3). Model FN2001-U1, which connects to a system input / output bus, has ground-fault monitoring, as well as an integrated degrade-mode feature. Redundant networking is done with one (1) network module per FACP [Simple-Loop Trouble].There is electrical isolation between the system bus and FACP.

Remote Display Terminals

The Remote Display Terminals (Models FT2014-U3 /R3and FT2015-U3 /R3) are remote annunciators that's how the existing status of Models FC922 / FC924. The remote display terminals (Models FT2014-U3/R3 and FT2015-U3/R3) are remote annunciators which can be configured as global displays, and indicate real-time system status.

Light-emitting diodes (LEDs) will illuminate for any given *Alarm, Supervisory and Trouble* Cerberus PRO-system event. The LCD screen will give details of the event in alphanumeric form. The display screen can be scrolled, via the four-way navigation button, to reveal additional events.

Model FT2014-U3 /R3 is a display-only remote annunciator that has one (1) button used to silence the local sounder. Model FT2015-U3 /R3 has three (3) control buttons for `acknowledging' events, `silencing' audible circuits and `resetting' the system. Additionally, there are three (3) user-programmable buttons available. Model FT2015-U3 /R3 has an integral key switch that enables the control buttons to operate.

The remote display terminals are remotely connected to Models FC922 and FC924, via the RS—485 interface. Models FC922 and FC924 require the Model FCA2016-U1 RS—485 module to provide communication to the remote display terminals. Model FCA2016-U1 supports Style 4 or Style 6 wiring. Up to eight (8) modules can be supported on a RS—485 bus.

The remote display terminals require 24VDC [nominal] power, and the necessary power can be provided from this Cerberus PRO FACP or from another UL / ULC Listed, 24VDC power source.

Note: A Model FHD2012-U1 inner door can be optionally purchased in UL markets. The inner door mounts with the optional Model FT201x Series Remote Display terminals. Having a Model FHD2012-U1 inner door installed can assist in preventing unauthorized access to the RDT.

S-series License Keys

The S1 license key (Model FCA2033-A1) allows for virtual monitoring and control between a 252 / 504-point addressable fire-only panel and a personal computer.

The S2 license key (Model FCA2034-A1) is a BACnet output, and is used for monitoring-only purposes by a 3rd-party system for life-safety objects.

The S3 license key (Model FCA2035-A1) is a combination license key that allows for virtual monitoring and control, as well as for distribution of BACnet (monitoring-only).

S-series License Keys (cont.)

A four-digit personal identification number (PIN) must be used in order to prevent unauthorized access.

Tabular Annunciators

Tabular annunciators allow system events sent from Cerberus PRO addressable panels to be displayed remotely in real-time.

The Model FT2008 series of tabular annunciators has 16 zones, and the Model FT2009 series uses 96 LEDs for 32 zones.

Up to two(2) light-emitting diodes (LEDs) can be used per zone. Tabular annunciators provide outputs for system and zone status, and are orderable in either black or red.

Remote Peripheral Module

The Remote Peripheral Module (Model FCA2018-U1) provides a means of connecting a Desigo FACP to a parallel printer (Model PAL-1) for creating hard copies of system-status and configuration reports.

Model FCA2018-U1 is a supervised, intelligent module that has built-intransient protection and plain-decimal addressing.

Model FCA2018-U1 is remotely connected to the Model FCA2016-U1 RS—485 communication bus from any Desigo Fire Safety system enclosure. Model FCA2018-U1 uses 'Class B' (Style 4) or 'Class A' (Style 6) wiring, and provides two (2) RS—232 serial ports and a one (1)parallel port, thus connecting to Model PAL-1.

LED Annunciator Driver

The Model FT2007-U1 LED Annunciator Driver provides custom graphic annunciators on addressable Cerberus PRO FACPs. This optional system module provides 96highly programmable outputs to drive LED indicators. There are 16 inputs to accommodate user-system commands: *Silence*, *Unsilence*, *Reset*, *Acknowledge* and *Lamp Test*.

Model FT2007-U1 is supervised via aRS–485 interface. A maximum eight (8) modules are allowed on each RS–485 communication bus.

Graphics Input / Output Driver

The Graphics Input / Output (I/O) Driver (ModelFT2003-U1) is a fire-system accessory on the RS–485(Model FCA2016-U1) interface circuit. Model FT2003-U1, which serves as a combination standalone remote display / operating unit, provides the ability to build a graphic annunciator for the Desigo Fire Safety 252 /504-point addressable FACPs.

Model FT2003-U1, which comes without an enclosure or display panel, consists of an indicator printed circuit board (PCB) and a driver PCB that are screwed together.

Each I/O driver has 32 outputs to drive highly programmable LEDs, and also contains 16 inputs to accommodate user-defined system commands, such as: *Acknowledge; Silence or Reset.*

NAC Expansion Module

The NAC expansion module (Model FCI2011-U1) provides either of the following additional NACs to a Cerberus PRO 252 / 504-point FACP:

- one (1)`Class A', or
- two (2)`Class B' NACs

Each NAC is rated at 3 Amps. Each NAC expansion module is monitored for open-line and short-circuit conditions.

Temperature and Humidity Range

Models FC922 and FC924 are UL 86410th Edition and ULC-S527 Listed for indoor dry locations within a temperature range of 120+/ 3°F (2°C) to 32+/ 3°F (0+/ 2°C) and a relative humidity of 93+/ 2% at a temperature of 90+/ 3°F (32+/ 2°C).

Details for Ordering

MODEL OR TYPE	PART NUMBER	PRODUCT
FCI2020-U1	S54400-A57-A1	Leased-Line / City -Tie Module
FCM2018-U3	S54400-C40-A2	Operating Interface Unit
FP2011-U1	500-450222	170-Watt Power Supply
FP2012-U1	S54400-Z60-A1	300-Watt Power Supply
FT2007-U1	S54400-A142-A1	LED Annunciator Driver
FT2008-U1	S54400-A143-A1	16-Zone Tabular Annunciator, Black
FT2008-R1	S54400-A144-A1	16-Zone Tabular Annunciator, Red
FT2009-U1	S54400-A145-A1	32-Zone Tabular Annunciator, Black
FT2009-R1	S54400-A146-A1	32-Zone Tabular Annunciator, Red
FT2014-U3	S54400-B80-A1	Remote Display Terminal, Black
FT2014-R3	S54400-B73-A1	Remote Display Terminal, Red
FT2015-U3	S54400-B88-A1	Remote Display Terminal, Black
FT2015-R3	S54400-B16-A1	Remote Display Terminal, Red
FTI2001-U1	S54400-A58-A1	Fire Terminal Board
FCA2015-U1	S54400-A63-A1	Digital Alarm Communication Transmitter
FN2001-U1	S54400-A60-A1	C-WEB Network Module
FCA2016-U1	S54400-A39-A1	RS—485 Interface
FCA2018-U1	S54400-A65-A1	Remote Peripheral Module
FCA2032-U1	S54400-B145-A1	Battery Disconnect Module
FCA2033-U1	S54400-P154-A1	License Key (S1) for remote access | remote view | remote operation
FCA2034-U1	S54400-P155-A1	License Key (S2) for BACnet output (monitoring only)
FCA2035-U1	S54400-P156-A1	License Key (S3) for remote access | remote view | remote operation | BACnet output
FCI2011-U1	S54400-A54-A1	NAC Expansion Module
FCI2016-U1	S54400-A55-A1	252-Pt. Periphery Board
FCI2017-U1	S54400-A56-A1	504-Pt. Periphery Board
XCI2001-U1	S54400-A69-A1	Releasing Module
FCM2019-U3	S54400-C41-A2	Operating Interface Unit [with LED]
FCM2022-U3	S54400-C44-A2	Blank Option Module
FCM2023-U3	S54400-C45-A2	LED Option Module [Red / Yellow bi-color LED; one (1)Yellow LED]
FCM2034-U3	S54400-C138-A1	LED Option Module: [Red / Yellow bi-color LED; one (1)Yellow LED]

Details for Ordering (cont.)

MODEL OR TYPE	PART NUMBER	PRODUCT
FN2006-U1	S54400-A61-A1	Single-Mode Fiber-Optic Module
FN2007-U1	S54400-A62-A1	Multi-Mode Fiber-Optic Module
FHB2001-U1	S54400-B47-A1	One-Height-Unit Back Box, Black
FHB2001-R1	S54400-B47-A2	One-Height-Unit Back Box, Red
FHB2002-U1	S54400-B48-A1	Two-Height-Unit Back Box, Black
FHB2002-R1	S54400-B48-A2	Two-Height-Unit Back Box, Red
FHD2001-U3	S54400-B45-A1	One-Height-Unit Outer Door, Black
FHD2001-R3	S54400-B40-A1	One-Height-Unit Outer Door, Red
FHD2002-U3	S54400-B32-A1	Two-Height-Unit Outer Door [with one (1) window], Black
FHD2002-R3	S54400-C53-A1	Two-Height-Unit Outer Door [with one (1) window], Red
FHD2003-U3	S54400-C42-A1	Two-Height-Unit Outer Door [with two (2) windows], Black
FHD2003-R3	S54400-B46-A1	Two-Height-Unit Outer Door [with two (2) windows], Red
FHD2004-U1	S54400-B52-A1	Inner door, Black
FHD2005-U1	S54400-B53-A1	Inner door, Solid Black
FHD2006-U1	S54400-C46-A1	Clear-lens window
FHD2012-U1	S54400-C135-A1	Optional inner door [for housing a Model FT201-series display terminal], Black
FHA2056-U1	S54400-B18-A1	Cerberus PRO Hardware Migration Kit, Black
FHA2056-R1	S54400-B19-A1	Cerberus PRO Hardware Migration Kit, Red
FHAMIQKIT-04	S54400-C24-A1	MXL-IQ Mechanical Migration Kit, Black
FHAMIQKIT-05	S54400-C25-A1	MXL-IQ Mechanical Migration Kit, Red
FHAMIQKIT-03	S54400-K1-A1	One (1) PMI cable & One (1) Expansion Cable
FHAMIQKIT-01	S54400-A66-A1	One (1) FCL2004 Module with PMI Cable
FHAMIQKIT-02	S54400-A67-A1	One (1) FCL2004 Module with Expansion Cable
FCL-MXLPLATE	S54400-B153-A1	Mounting Bracket for FCL2004 (2HU/USCG)
FH2072-UA	S54433-A5- A1	Universal Battery Cabinet
FTH2073-UA	S54433-A6- A1	Universal Annunciator Cabinet
FH2072-UA	S54433-A5- A1	Universal Battery Cabinet
FTH2073-UA	S54433-A6- A1	Universal Annunciator Cabinet

Electronics Package

MODEL OR TYPE	PART NUMBER	PRODUCT
FC922-US	S54400-C14-A1	252-Point Fire System with 170 Watt Power Supply and standard operator interfaces. Includes: ▪ FP2011-U1 (1 Qty.) ▪ FCI2016-U1 (1 Qty.) ▪ FCM2018-U3 (1 Qty.)
FC924-US	S54400-C15-A1	504-Point Fire System with 170 Watt Power Supply and standard operator interfaces. Includes: ▪ FP2011-U1 (1 Qty.) ▪ FCI2017-U1 (1 Qty.) ▪ FCM2018-U3 (1 Qty.)
FC922-UE	S54400-C16-A1	252-Point Fire System with 170 Watt Power Supply and standard operator interfaces. (with 24-zone LEDs) Includes: ▪ FP2011-U1 (1 Qty.) ▪ FCI2016-U1 (1 Qty.) ▪ FCM2019-U3 (1 Qty.)
FC924-UE	S54400-C17-A1	504-Point Fire System with 170 Watt Power Supply and standard operator interfaces. (with 24-zone LEDs) Includes: ▪ FP2011-U1 (1 Qty.) ▪ FCI2017-U1 (1 Qty.) ▪ FCM2019-U3 (1 Qty.)
FT924-US	S54400-C18-A1	Network Terminal w/ standard operator interface Includes: ▪ FTI2001-U1 (1 Qty.) ▪ FCM2018-U3 (1 Qty.)
FT924-UE	S54400-C19-A1	Network Terminal w/ standard operator interface (with 24-zone LEDs) Includes: ▪ FTI2001-U1 (1 Qty.) ▪ FCM2019-U3 (1 Qty.)
FC922-UT	S54400-C20-A1	252-Point Fire System with 300 Watt Power Supply and standard operator interfaces Includes: ▪ FP2012-U1 (1 Qty.) ▪ FCI2016-U1 (1 Qty.) ▪ FCM2018-U3 (1 Qty.)
FC924-UT	S54400-C21-A1	504-Point Fire System with 300 Watt Power Supply and standard operator interfaces Includes: ▪ FP2012-U1 (1 Qty.) ▪ FCI2017-U1 (1 Qty.) ▪ FCM2018-U3 (1 Qty.)

Electronics Package (Cont.)

MODEL OR TYPE	PART NUMBER	PRODUCT
FC922-UF	S54400-C22-A1	252-Point Fire System with 300 Watt Power Supply and standard operator interfaces(with 24-zone LEDs) Includes: ▪ FP2012-U1 (1 Qty.) ▪ FCI2016-U1 (1 Qty.) ▪ FCM2019-U3 (1 Qty.)
FC924-UF	S54400-C23-A1	504-Point Fire System with 300 Watt Power Supply and standard operator interfaces(with 24-zone LEDs) Includes: ▪ FP2012-U1 (1 Qty.) ▪ FCI2017-U1 (1 Qty.) ▪ FCM2019-U3 (1 Qty.)
Canadian-Specific Applications:		
FCM2035-U3	S54400-C140-A1	Enhanced Operating Unit (with LEDs)

Note: Refer to Data Sheet# 9800 for Canadian-Specific Electronics Package.

Related Documentation

Product	Datasheet Number
Cerberus PRO Operating Interface Units	9801
Cerberus PRO System Periphery Boards	9802
Cerberus PRO Fire Terminal and Equipment	9803
Cerberus PRO Digital Alarm Communicator Transmitter (DACT)	9804
C-WEB Network Module	9805
170-Watt and 300-Watt Power Supplies	9806
Cerberus PRO Fire-Alarm Enclosures and Equipment	9807
NAC Expansion Module	9808
Releasing Module	9809
Leased-Line / City-Tie Module	9810
Cerberus PRO Remote Peripheral Module	9811
Cerberus PRO Remote Display Terminals	9812
Single / Multi-Mode Fiber-Optic Modules	9814
LED / Blank Option Modules	9816
Battery Disconnect Module	9819
S-series license keys	9820
Cerberus PRO Marine Fire and Detection Equipment	9822
Cerberus PRO LED Annunciator Driver	9824
Cerberus PRO 16 & 32 -Zone Tabular Annunciators	9825
Cerberus PRO Migration Hardware Kit	9826

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice.
The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

Cerberus® PRO

Siemens Industry, Inc.
Smart Infrastructure - Building Products
2 Gatehall Drive • Parsippany, NJ 07054
Tel: (973) 593-2600

March - 2023
(Rev. 10)

SIEMENS

Cerberus® PRO

Remote Display Terminals (RS-485 Interface)

Models FT2014-U3 / R3 and FT2015-U3 / R3 (with Model FCA2016-U1)

Architect & Engineer Specifications

Models FT2014-U3 / R3 and FT2015-U3 / R3:

- ☐ 2" - x – 4-¾" backlit LCD screen
- ☐ Event and audible-status LEDs
- ☐ Supports 'Class B' (Style 4) or 'Class A' (Style 6) wiring
- ☐ Built-in transient protection
- ☐ Mounts in its own enclosure
- ☐ Optional system control
- ☐ Downloadable firmware
  - Built-in flash electrically erasable programmable read-only memory (EEPROM)
- ☐ Scroll buttons to view additional events
- ☐ Local sounder
- ☐ UL 864 9th Edition, ULC Listed
- ☐ FM, CSFM & NYC Fire Dept. Approved

Model FCA2016-U1:

- ☐ RS-485 module provides communication to Remote Display Terminals
- ☐ Dual, standardized RS-485 interface
- ☐ Supports 'Class B' (Style 4) and 'Class A' (Style 6) wiring configurations
- ☐ Up to eight (8) devices on the RS-485 Style 6 loop Universal Fire Protocol (UFP) limitation
- ☐ Electrical isolation between the RS-485 interfaces and the panel
- ☐ Ground-fault monitoring
- ☐ UL 864 9th Edition, ULC Listed
- ☐ FM, CSFM & NYC Fire Dept. Approved

Product Overview

The Remote Display Terminals (Models FT2014-U3 / R3 and FT2015-U3 / R3) are remote light-emitting diode (LED) / liquid-crystal display (LCD) units that show the existing status of a Cerberus PRO 252 / 504-point system.

A LED will illuminate for any given ***Alarm, Gas Alarm, Supervisory*** and ***Trouble*** Cerberus PRO-system event. A 2" -x- 4-3/4" LCD screen will give details of the event in alphanumeric form. The display screen can be scrolled to reveal additional events. Optional remote-system-control capabilities are also available.

The Remote Display Terminals (as well as Model FCA2016-U1) are FM (#3010); CSFM (#7165-0067:0259) and FDNY (#6104) Approved.

Specifications

Each Remote Display Terminal has separate LEDs for *Alarm, Gas Alarm, Supervisory, and Trouble* events on a Cerberus PRO FACP. Each LED will flash when 'unacknowledged' events are present. The LED will change to 'steady', upon acknowledgment of the event.

Additionally, the remote display terminals have a LED to indicate system power; a separate ground-fault LED, and four (4) additional user-programmable LEDs. There are also two (2) LEDs that indicate the state of audible circuits on the system:

- One (1) LED to indicate that the circuits are 'active'
- One (1) LED to indicate the circuits have been 'silenced'

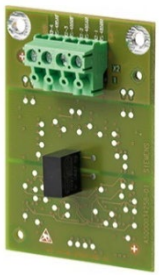
When the Cerberus PRO FACP is in its 'normal' state (with no events present), the screen will annunciate the system ID data, and will show the date, time-of-day. When an event has been triggered to the Cerberus PRO panel, the LCD display will show the following:

- Event type and zone
- Custom message for that zone
- Usage of the zone
- 'Unacknowledged' or 'Acknowledged' event

In addition to the aforementioned features, the display will show the total number of all types of events present on the system.

The display has a backlight feature that operates upon receiving any event information or when any operator buttons are pressed.

Model FT2015-R3
Remote Display Terminal



Model FCA2016-U1
RS-485 Interface

Specifications (Cont.)

The Model FT2014-series display terminal has a local sounder silence button, which operates when any events are displayed on the system. Pressing any operator buttons will silence the local sounder when an event is present.

Each remote display terminal has a navigation button that is used for displaying next-event or previous-event information in the sequence and has a local sounder silence button.

The Model FT2014-series has one (1) button used to silence the local sounder. The Model FT2015-series has three (3) control buttons for 'acknowledging' events, silencing audible circuits and resetting the system. Additionally, there are three (3) user-programmable buttons available. The Model FT2015-series has an integral key switch that enables the control buttons to operate.

The remote display terminals are remotely connected to the Cerberus PRO FACP, via the RS-485 interface. The Model FC922 and FC924 Cerberus PRO panels require the Model FCA2016-U1 RS-485 module to provide communication to the remote display terminals.

Model FCA2016-U1 supports Style 4 or Style 6 wiring. Up to eight (8) modules can be supported on a RS-485 bus. Input power of 24VDC is required to run the remote display terminals and can be provided from a Cerberus PRO FACP or other UL Listed 24VDC power source.

The remote display terminals have screw terminals capable of supporting 12 to 22 American-Gauge Wires (AWG).

The remote display terminals can be mounted in a (2) two-gang electrical box or a (4) four-inch square electrical box. No flush-trim kit is required. Each unit is approximately 12-1/4"(31.2cm.) wide; 9" (22.9cm.) high; and 2-1/2" (6.4cm.) deep.

Each RS-485 interface is approximately 1.97" (5cm.) wide; 2.76" (7cm.) high; and 0.6" (1.5cm.) deep. The weight of Model FCA2016-U1 is 0.044 Lbs. (20g).

Temperature and Humidity Range

Products are UL 864 9th Edition listed for indoor dry locations within a temperature range of 120+/ 3°F (2°C) to 32+/ 3°F (0+/ 2°C) and a relative humidity of 93+/ 2% at a temperature of 90+/ 3°F (32+/ 2°C).

Technical Data

RS-485 Interface	**Voltage**		3.3VDC
	Operating Current	**Normal (Standby Mode)**	Approx. 75 mA
		Alarm	Approx. 136 mA
	Connection		Bus structure
	Communication mode		Half-duplex
	Number of participants		Eight (8), max.
	Maximum wire length		3940 ft.(1200 meters) (unshielded / twisted-pair wiring) for both Class A & Class B
Connections	**RS-485 Interface:**		
	▪ **Design**		4-pole screw terminal
	▪ **Cross-section**		12 to 22 American-Gauge Wires (AWG)
	To the operating unit		Plug-in-type connections
Power Requirements	**FT2014-Series**		24VDC @ 55mA
	FT2015-Series		

Details for Ordering

MODEL OR TYPE	PART NUMBER	PRODUCT
FT2014-U3	S54400-B80-A1	Remote Display Terminal
FT2014-R3	S54400-B73-A1	Remote Display Terminal, Red
FT2015-U3	S54400-B88-A1	Remote Display Terminal [with control]
FT2015-R3	S54400-B16-A1	Remote Display Terminal [with control], Red
FCA2016-U1	S54400-A39-A1	RS-485 Interface

Related Documentation

Product	Datasheet Number
Remote Peripheral Module	9811
252-point Cerberus PRO System	9815
504-point Cerberus PRO System	
Intelligent Voice Communication system	9821

This Area Left Intentionally Blank

NOTICE – The information contained in this data-sheet document is intended only as a summary and is subject to change without notice.
The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

Cerberus® PRO

Siemens Industry, Inc.
Smart Infrastructure - Building Products
2 Gatehall Drive • Parsippany, NJ 07054
Tel: (973) 593-2600

February - 2023
(Rev. 6)

SIEMENS

FACP Accessories

PAD-5 Addressable Power Supply Unit

Models PAD5-6A | PAD5-6A-R | PAD5-9A | PAD5-9A-R

Architect & Engineer Specifications

- ☐ PAD-5 comes standard with a variable of four (4) `Class B', two (2) `Class A' output circuits, and is expandable, via Model PAD-5-CLSA, to four (4) additional `Class B', two (2) `Class A' output circuits
- ☐ Power supplies support notification-appliance circuit (NAC) power:
  - up to 6A used with Model FP2011-U1
  - up to 9A used with Model FP2012-U1
- ☐ Complete, real-time PAD-5 unit status at the main fire-alarm control panel
- ☐ 24VDC output voltage
  - 3A of auxiliary-output power
- ☐ Automatically recognized variable end-of-line (EOL) values
  - 2.2k – 24kΩ
- ☐ Multi-module mounting in a two-height-unit (2HU) enclosure
- ☐ Model PAD-5-CLSA allows optional releasing functionalities for:
  - pre-action
  - deluge
  - clean agent
- ☐ Built-in strobe synchronization:
  - supports coded audible signals, including Temporal 3 | T4 patterns
- ☐ `Form C' general `Trouble | AC Fail' monitoring contact
- ☐ Battery supervision and control
- ☐ Ground-fault detection
- ☐ Advanced microprocessor control
- ☐ Uses Flash memory-based system firmware
  - optional system-diagnostic and firmware-upgrade tool
- ☐ Americans with Disabilities Act (ADA) compliant
- ☐ UL 864 10th Edition | UL 1076 | UL 2017 | UL 2572 Listed
- ☐ ULC-S527 and ULC-S576-14

Product Overview

Used with Siemens - Fire Safety fire alarm control panels (FACPs); PAD-5 is an UL 10th Edition | ULC-S527 Listed, addressable power-supply unit that complies with the notification requirements of the Americans with Disabilities Act (ADA). Each PAD-5 unit can provide up to 9 Amps of NAC power with up to eight (8) supervised NACs and auxiliary power output.

Features include:

- Intelligent controller resides on SLC loop
- Four (4) `Class A' or eight (8) `Class B' NACs that can be mixed
- `Class X' wiring-isolator device
- Temperature-compensated battery-charging circuits
- `Trouble' relays for remote monitoring
- Diagnostic light-emitting diodes (LEDs)
- Alternating Current (AC) power connection

The Siemens NACs, which connect with alarm signaling devices, have been designed to provide the highest level of reliability and performance.

Signal coding on the circuits is accomplished through integrated circuits (rather than relays), which eliminates mechanical wear on the output circuits.

Additionally, each PAD-5 unit supports P2 addressable communications and P2 device-level fault indicators – via use of a Model XDLC loop card connected to a Siemens Modular control panel. Monitoring status and individual NAC control from a single address are also provided by a PAD-5 unit. Per ULC, separate ground-fault detection and indication for all remote power supplies are required. The GND FLT Relay provides a Normally Open (N.O.), `Form A' contact that can be monitored via a monitoring module, such as Siemens Model HTRI-series modules or the 4 In / 4 Out Module, Model FDCIO422.

In terms of electrical characteristics, PAD-5 power supply units provide steady 24VDC output voltage to each NAC – independent of voltage fluctuations on the primary or secondary power source. Consequently, a larger voltage drop and a greater wire length for each NAC are supported by a Siemens PAD-5 unit.

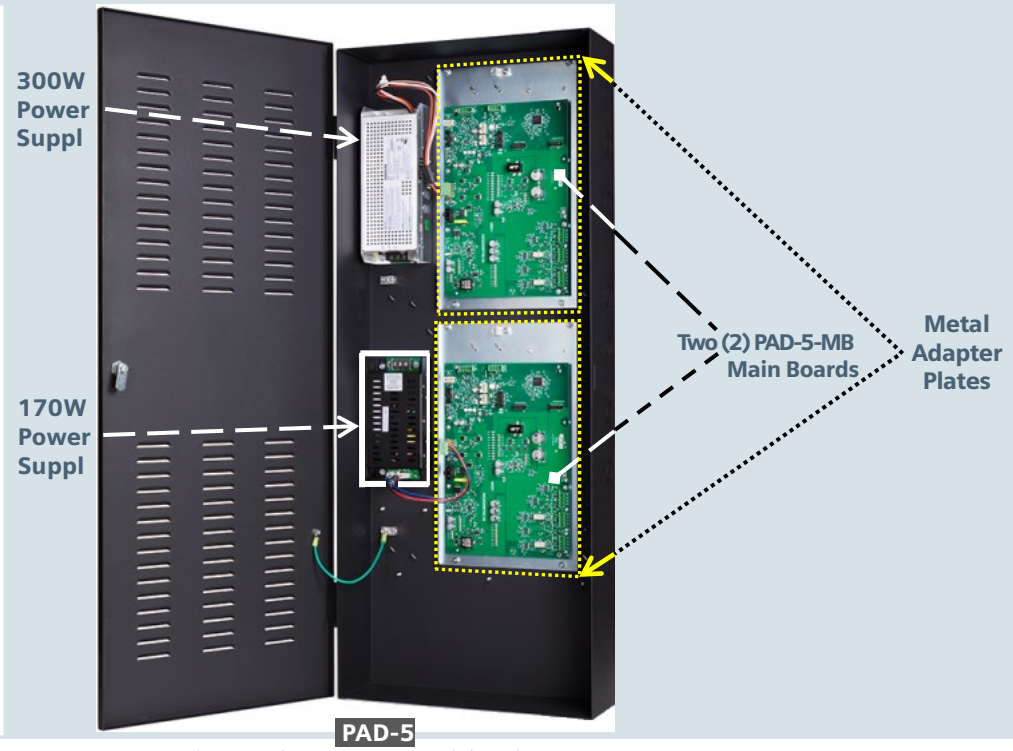
Specifications

The Siemens PAD-5 can be configured in the following manner that makes the outputs easily programmable:

- `Steady' outputs
- Synchronized strobe outputs
- American National Standards Institute (ANSI) Temporal 3
- ANSI Temporal 4 (for carbon monoxide [CO] alarm signal)
- March Time 30, 60 or 120 PPM

There is also one (1) supervised NAC Follower input circuit that is driven by a Siemens FACP, NAC or from a PAD-5 main board, Model PAD-5-MB.

NOTE: One-height-unit (1HU) and two-height-unit (2HU) enclosures are versatile, universal housings. Either size can be used on any type of Siemens PAD-series power-supply unit and the Booster Amplifier.



PAD-5

Typical configuration of two (2) main boards mounted in a two-height-unit (2HU) enclosure

Specifications – (continued)

Four (4) `Class B' or two (2) `Class A' NACs are standard:

- Rated 3A each for conventional reverse polarity 24 VDC notification appliances with various operation modes
- The four (4) outputs can be configured as non-Alarm, contact-only input circuits
- Capability to mix-and-match Class A/B expansion NAC circuits

Internal 6.5A or 9A power supply / battery charger:

- Charges internal batteries up to 18AH (for 1HU); up to 35AH (for 2HU), and up to 100AH in external cabinet (Siemens Model BB-55–series battery boxes; available in black or red)
- Provides status monitoring of battery | input power | Earth faults

PAD-5

Typical 1HU enclosure configuration

PAD-5 Unit Components

PAD-5-MB

The main board (Model PAD-5-MB) used with PAD-5 notification-extender units provides remote, auxiliary power for signaling appliances. Model PAD-5-MB also allows for expansion of notification appliances (NACs) that plug into each main board. Each PAD-5-MB main board connects via the P2 loop of a Siemens `X'-series Device Loop Card (Model XDLC) connected to the Siemens Modular fire-alarm control panel (FACP). Up to 32 Siemens PAD-5 main boards or mixture expansion cards can connect to one (1) Model XDLC at a time. Additionally, Model PAD-5-MB has one (1) address, and is programmed with the Siemens Device Programmer / Test Unit, Model DPU.

Model PAD-5 MB

PAD-5-CLSA

Used in conjunction with PAD-5 units, the `Class A/B' Expansion Module (Model PAD-5-CLSA) provides additional connectivity of Siemens signaling appliances. In order for proper additional functionality, two (2) circuits, rated at 3A max., are wired as `Class A', or four (4) circuits are wired as `Class B'. Model PAD-5-CLSA uses one (1) address on the **P2** loop. The address for Model PAD-5-CLSA must be the next sequential (numerical) address to that of the connected Model PAD-5-MB main board.

The Model DPU programmer / test unit is used to program the P2 address of each Model PAD-5-CLSA. There are LED indicators for each zone, as well as for the P2 interface and for the status of the card. Additionally, Model PAD-5-CLSA can be used in Sinorix® pre-action, deluge sprinkler, or for clean-agent control. There is an on-board releasing disconnect switch that can be used to disable power to both releasing circuits, thus preventing accidental discharge of clean agent during routine maintenance.

Model PAD-5-CSLA
Mounted to a PAD-5-MB Main

PAD-5-CDC

Model PAD-5-CDC is the Conventional Zone Module used with PAD-5 notification-extender units. Specifically, each Model PAD-5-CDC supports four (4) `Class A' or four (4) `Class B' conventional-detection zone-input circuits. The address for Model PAD-5-CDC must be the next sequential (numerical) address to that of the connected Model PAD-5-MB main board.
Up to 30 Siemens conventional smoke detectors are supported, per zone.

All information, per circuit, is displayed from the Operating Unit of the Siemens Modular FACP.
Each Model PAD-5-CDC supports Siemens and other-branded smoke detectors, as well as one (1) beam detector per zone. Additionally, Model PAD-5-CDC provides optional alarm verification by circuit, as well as consistent ground fault detection.

Model PAD-5-CDC
Mounted to a PAD-5-MB Main Board

PAD-5 Enclosures

There are two (2) types of unit enclosures available for Siemens PAD-5 power units / extenders. The one-height-unit (1HU) enclosure, Model PAB-ENCL, is the basic enclosure.

Each 1HU enclosure can hold one (1) 170W or one (1) 300W Siemens power supply; one (1) PAD-5 main board, and one (1) adapter plate, and one (1) Model PAD-5-CDC or one (1) Model PAD-5-CLSA. The two-height-unit (2HU) enclosure, Model PAB2-ENCL, allows for more versatility. Each 2HU enclosure can house up to two (2) PAD-5 main boards and power supplies.

A red version of each enclosure is also furnished: Model PAB-ENCL-R for the 1HU enclosure and Model PAB2-ENCL-R) for the 2HU enclosure.

PAB-ENCL
1 HU Enclosure

PAB2-ENCL
2 HU Enclosure

Power Supplies

There are also two (2) types of power-limited power supplies for Siemens PAD-5 power units / extenders. (170W) The Model FP2011-U1 power supply provides up to 6 Amps. at 170 Watts of main power to PAD-5, and Model FP2012-U1 provides up to 9 Amps. at 300 Watts.

Additionally, the power supplies can recharge and maintain backup charge for the two (2) back-up batteries. The 170W power supply, Model FP2011-U1, can provide battery-backup charge of 7A (up to 35AH), and the 300W power supply, Model FP2012-U1, provides battery-backup charge of 35AH (up to 100AH)

FP2011-U1
(up to 170W)

FP2012-U1
(up to 300W)

Status Indicator LEDs

Battery Charging Status:	Green	Red
NAC 1 Status:	Yellow	
NAC 2 Status:	Yellow	
NAC 3 Status:	Yellow	
NAC 4 Status:	Yellow	
Auxiliary Output Status:	Yellow	
3.3VDC Status:	Green	
Main Microprocessor Status:	Yellow	
P2 Loop Status:	Green	Red

Configuration Options

CIRCUIT TYPE	PAD-5 MAIN BOARD 1	2	3	4	Model CLSA EXPANSION CARD 5	6	7	8	EOL REQUIRED
Sync Coded Pattern	✓	✓	✓	✓	✓	✓	✓	✓	Yes 2.2k – 24kΩ
Auxiliary Power Output	✓	✓	✓	✓	✓	✓	✓	✓	–
Releasing*					✓	✓			Yes to 24kΩ
Shorting Device Input	✓	✓	✓	✓	✓	✓	✓	✓	Yes 2.2k – 24kΩ

* denotes Circuits 7 and 8 are not used for either Aux. Pwr. or NAC Output when PAD-5 is configured for releasing

Technical Data

LINE IMPEDANCE:	3.2Ω, max per loop
ALARM CURRENT: [For NACs & aux. power]	3.0A per circuit, max. – 6A, max. [via FP2011-U1] – 9A, max. [via FP2012-U1]
TOTAL OUTPUT POWER:	24VDC @ 6A, [with the 170W power supply, Model FP2011-U1] 24VDC @ 9A, [with the 300W power supply, Model FP2012-U1]
AMBIENT TEMPERATURE:	+32° – +120°F (0° – +49°C)
RELATIVE HUMIDITY:	0 – 93% @ 86°F (30°C); (non-condensing)
AUXILIARY POWER CIRCUIT:	Each circuit @ 3A, max.
BATTERY CHARGING CAPACITY:	up to 100AH
OUTPUT CIRCUITS | CONFIGURATIONS:	Two (2) `Class A' – up to four (4) `Class A' (via Model PAD-5-CLSA) – Four (4) `Class B' – One (1) `Class A', Two (2) `Class B'
INSTALLATION ENVIRONMENT:	Indoor | Dry
NACS:	– Supervised, power-limited ▪ 10mA standby, max. ▪ 3A active Operating ▪ 0.3A Regulated – four (4) circuits – 2K ohms (+), 8K Ω (-)

Physical Properties

PAD-5 1HU-UNIT DIMENSIONS: [W -x- H -x- D]	16.0" –**x**– 24.0" –**x**– 3.50" (40.6 cm. -**x**- 60.9 cm. -**x**- 8.8 cm.)
PAD-5 2HU-UNIT DIMENSIONS: [W -x- H -x- D]	16" –**x**– 40" –**x**– 5.5" (40.6 cm. -**x**- 101.6 cm. -**x**- 14 cm.)
ENCLOSURE TYPES:	**Black** or Red

Details for Ordering

MODEL OR TYPE	PART NUMBER	PRODUCT
PAB-ENCL	S54339-A8-A1	PAD-5 1HU enclosure
PAB-ENCL-R	S54339-A9-A1	PAD-5 1HU enclosure, red
PAB2-ENCL	S54339-A10-A1	PAD-5 2HU enclosure
PAB2-ENCL-R	S54339-A11-A1	PAD-5 2HU enclosure, red
PAD-5-MB	S54339-A5-A1	PAD-5 main board (with one [1] adapter plate)
PAD-5-CLSA	S54339-A6-A1	PAD-5 addressable NAC (Class A/B) expansion card
PAD-5-CDC	S54339-A7-A1	PAD-5 Conventional Detector Card
FP2011-U1	500-450222	170W Power Supply
FP2012-U1	S54400-Z60-A1	300W Power Supply

Details for Ordering – (cont.)

PAD-5 1HU-only Kits

MODEL OR TYPE	PART NUMBER	PRODUCT
PAD5-6A	S54339-A15-A1	Complete **6A** PAD-5 kit: – One (1) Unit Enclosure, **black** (PAB-ENCL) – One (1) Main Board, PAD-5-MB (with one [1] adapter plate included) – One (1) 170W power supply, FP2011-U1
PAD5-6A-R	S54339-A16-A1	Complete **6A** PAD-5 kit: – One (1) Unit Enclosure, red (PAB-ENCL-R) – One (1) Main Board, PAD-5-MB (with one [1] adapter plate included) – One (1) 170W power supply, FP2011-U1
PAD5-9A	S54339-A17-A1	Complete **9A** PAD-5 kit: – One (1) Unit Enclosure, **black** (PAB-ENCL) – One (1) Main Board, PAD-5-MB (with one [1] adapter plate) – One (1) 300W power supply, FP2012-U1
PAD5-9A-R	S54339-A18-A1	Complete **9A** PAD-5 kit: – One (1) Unit Enclosure, red (PAB-ENCL-R) – One (1) Main Board, PAD-5-MB (with one [1] adapter plate) – One (1) 300W power supply, FP2012-U1

PAD-5 Unit Accessories

MODEL OR TYPE	PART NUMBER	PRODUCT
BAAP	S54339-A14-A1	Adapter Plate (used to mount a booster amplifier)
P3AP	S54339-A12-A1	Adapter Plate (used to mount a Siemens PAD-3 auxiliary power unit)
P4AP	S54339-A13-A1	Adapter Plate (used to mount a Siemens PAD-4 auxiliary power unit)

This Area Left Intentionally Blank

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice.
The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

Siemens Industry, Inc.
Smart Infrastructure – Building Products
2 Gatehall Drive • Parsippany, NJ 07054
Tel: (973) 593-2600

February - 2023
(**Rev. 3**)

SIEMENS

Peripheral and Detection Initiating Devices

XMS-Series Manual Pull Stations

Addressable & Conventional Models

Architect & Engineer Specifications

- ☐ Single & Dual-Action models
- ☐ Built-in ISO*technology*™
  - Complies with NFPA 72 Class X (Style 7) survivability requirements.
  - Supports up to 252 X-Series isolation peripherals per SLC / DLC
  - Supports up to 30 addressable devices between isolator devices
- ☐ Compatible with current Siemens Fire Alarm Control Units (FACU's)
- ☐ Low current draw
- ☐ Polarity insensitive (in non-isolation mode) via SureWire technology
- ☐ Multi-color status LED
- ☐ T-45 reset key
- ☐ Model XMS-2S:
  - Two stage operation via unique activation key
  - T-45 reset key for device reset
- ☐ Minimal mounting depth allowing compatibility with standard single gang electrical boxes in retrofit sites
- ☐ Trouble indication during service and maintenance
- ☐ Single action, Dual-action, and metal versions available
- ☐ French, Portuguese, and Spanish versions available
- ☐ UL38 Listed
- ☐ ULC-S528 Listed
- ☐ RoHS compliant

Product Overview

The XMS-Series of manual pull stations are a complete addressable and conventional pull station portfolio including single action, dual-action, 2-Stage, and metal versions. The addressable versions feature built-in Class X (Style 7) isolation capability for increased system survivability. All models feature a T-45 reset key to match the fire alarm panel enclosure. Addressable models also feature a tri-color status LED to indicate normal, alarm, and trouble status. All models utilize one address.

The manual stations can be commissioned to operate in non-isolation (polarity insensitive) or isolation with Class X mode of operation.

Specifications

Models XMS-S, XMS-D, XMS-DA, XMS-2S, and XMS-M are compatible with Siemens FACPs. The Model XMS-S is a single action pull station in a plastic housing that requires one action by the user to initiate the alarm. Models XMS-D, XMS-2S, and XMS-DA are dual-action pull stations in a plastic housing that require two actions by the user to initiate an alarm. The Model XMS-M is a single action pull station in a metal housing that requires one action by the user to initiate the alarm. These models are field installed addressable devices containing advanced control panel communication technology.

The XMS-Series manual pull stations feature a "maintenance trouble" that places the fire alarm panel into a trouble condition if an XMS is accidentally left in an armed status when the cover is removed for maintenance work.

Model XMS-D

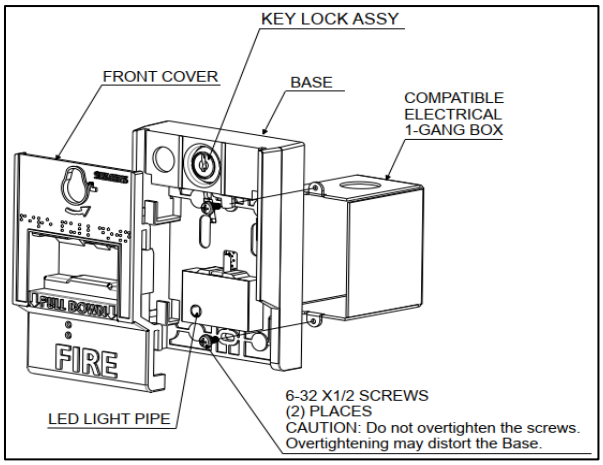
This technology provides bi-directional communication with the connected control panel. To reset the stations, insert the Siemens T-45 key provided into the key lock and turn the key 10-15 degrees counterclockwise as the arrow shows. The cover will move upward to the normal position. Rotate the key clockwise and remove key from the lock. At Normal position the top of the Cover is flush with the top surface of the Base. Reset the Fire Alarm Control Panel to clear the alarm.

The addressable XMS pull station variants are compatible with all current models of Desigo Fire Safety & Cerberus PRO commercial fire alarm control panels. These devices can be wired in either Isolation Mode or Polarity Insensitive Mode Wiring.

The XMS-S & XMS-M manual station front cover has a recess pocket to pull down and locks in position after the alarm is initiated. The XMS-D, XMS-DA & XMS-2S manual stations have an additional lever labeled "PUSH HERE THEN" to get access to the front cover pocket to initiate the alarm.

UL RoHS COMPLIANT ULC

Mounting Diagram



Technical Data

Operating Voltage Range	13 - 32VDC
Max Average Operating Current @ 24v:	500µA
Operating Temperature Range	32° — 120°F (0° — 49°C)
Operating Humidity Range	0 — 95%, RH

Physical Properties

Construction:	High impact polycarbonate plastic Aluminum
Shipping Weight:	1.0 lbs
Dimensions:	5.50" H x 4.0" W x 1.250" D
Compliance:	ADA
Compatible Electrical Boxes:	2-1/2" deep 1-gang box

Model XMS-DA

Model XMS-2S

Order Details

Model or Type	Part Number	Description
XMS-S	S54321-F7-A1	Addressable Single Action Manual Pull Station with Isolation
XMS-D	S54321-F8-A1	Addressable Dual-Action Manual Pull Station with Isolation
XMS-M	S54321-F19-A1	Addressable Single Action Metal Pull Station with Isolation
XMS-SP	S54321-F9-A1	Addressable Single Action Manual Pull Station with Isolation - Portuguese Text
XMS-DP	S54321-F10-A1	Addressable Dual-Action Manual Pull Station with Isolation - Portuguese Text
XMS-SE	S54321-F11-A1	Addressable Single Action Manual Pull Station with Isolation - Spanish Text
XMS-DE	S54321-F12-A1	Addressable Dual-Action Manual Pull Station with Isolation - Spanish Text
XMH-501	S54321-F18-A1	Conventional Dual-Action Manual Pull Station for Agent Release
XMS-501	S54321-F16-A1	Conventional Dual-Action Manual Pull Station
XMS-51	S54321-F15-A1	Conventional Single Action Manual Station with Auxiliary Relay and Key Switch
SMBOX-XMP	S54321-F20-A1	Surface Mounting Backbox for X-Series Manual Stations
APLT-XMP	S54321-F21-A1	Adapter Plate for X-Series Manual Stations to Legacy Surface Backboxes
4DGBOX- XMP	S54321-F22-A1	Adapter Plate for X-Series Manual Stations to 4" and Double-Gang Backboxes

Specific Details for Canadian Orders

Model or Type	Part Number	Description
XMS-DA	S54321-F13-A1	Addressable Dual-Action Manual Pull Station with Isolation and Auxiliary contact – French Text
XMS-2S	S54321-F14-A1	Addressable 2-Stage Dual-Action Manual Pull Station with Isolation and Auxiliary contact – French Text
XMS-51C	S54321-F23-A1	Conventional Dual-Action Pull Station with Auxiliary contact – French Text

This Page Left Intentionally Blank

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice.
The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

Siemens Industry, Inc.
Smart Infrastructure - Building Products
2 Gatehall Drive • Parsippany, NJ 07054
Tel: (973) 593-2600

June - 2023
(Rev. 2)

SIEMENS

Cerberus® PRO
Detectors and Peripherals

Photoelectric Smoke Detector [with ISO*technology*™]

Model OP921

Architect & Engineer Specifications

- ☐ UL 268 7th Edition Listed
- ☐ Built-in ISO*technology*™
- ☐ 252 Isolation devices per SLC
- ☐ Each detector is self-testing:
  - Self-monitored for sensitivity with UL Listed limits
  - complete diagnostics performed every 10 seconds
- ☐ Compatible with Model 8720 | DPU (device programmer / loop tester)
- ☐ Polarity insensitive via *SureWire*™ technology
- ☐ Functions with Model DB-11–series mounting bases
- ☐ Tri-color detector-status light-emitting diode (LED) with 360 ° view
- ☐ Field-selectable application-sensitivity profiles
- ☐ Remote sensitivity-measurement capability
- ☐ Utilizes advanced, microprocessor-based signal processing
- ☐ Extended temperature-and-humidity operating range
- ☐ Automatic environment compensation
- ☐ Superior electromagnetic interference (EMI) and radio-frequency interference (RFI) immunity
- ☐ Restriction of Hazardous Substances (RoHS compliant)
- ☐ UL Listed | FM, CSFM Approved
  - UL 268: `Open Area Smoke Detection'
  - UL 268A (Duct) - `In-duct housing' use
  - UL 268A (Duct) - `Direct-in-Duct' use
  - ULC-S529: 'System Smoke Detector'
  - ULC-S530: 'Heat Actuated Fire Detection'
  - FM 3230
  - CSFM | File: 7272-0067:0258

Product Overview

The Photoelectric Smoke Detector (Model OP921) uses state-of-the-art microcontroller circuitry and surface-mount technology for maximum reliability. Model OP921 incorporates an optical sensor using a light-scattering detection principle. The device utilizes advanced software algorithms to analyze the signals providing highly stable and accurate smoke detection.

Model OP921 is UL 268 7th edition listed incorporating advanced built-in **ISO*technology***™ - True Class-X SLC operation (use is optional) greatly improving system reliability and circuit integrity while providing advanced addressable fault finding.

Each detector fits into one (1) wall-or-ceiling footprint, and only occupies one (1) address on the signal-line circuit (SLC)

Model OP921 is a plug-in, two-wire, addressable photoelectric smoke detector whose value is increased with built-in **ISO*technology*** feature. Model OP921 is Underwriters' Laboratories Listed [UL268A Listed for direct in-air duct usage].

Each detector utilizes a dust-resistant photoelectric smoke chamber and microprocessor-based electronics with a low-profile plastic housing. Every Model OP921 fire detector is shipped with a protective dust cover.

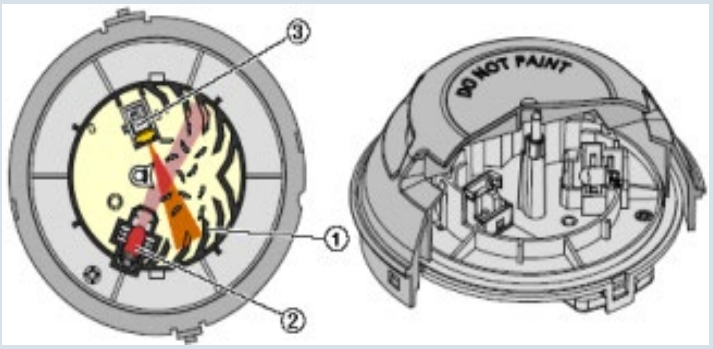
Operation

Model OP921 is a wide-spectrum, photoelectric smoke detector that incorporates an infrared light-emitting diode (IRLED), as well as a light-sensing photodiode. Under normal conditions, light transmitted by the LED is directed away from the photodiode and scattered through the smoke chamber in a controlled pattern.

The smoke chamber is designed to manage light dissipation and extraneous reflections from dust particles or other non-smoke, airborne contaminants in such a way as to maintain stable, consistent detector operation. When smoke enters the detector chamber, light emitted from the IRLED is scattered by the smoke particles and is received by the photodiode (see: images on page 2).

Model OP921
Photoelectric Smoke Detector

1. Labyrinth
2. Optical transmitter
3. Optical receiver



Model OP921

1. Dust cover
2. Photoelectric smoke detector

Sensitivity Settings

Application Parameter Sets

Model OP921 provides (2) pre-programmed sensitivity parameter sets that can be selected by the Siemens fire-alarm control panel in order to match the expected application or environmental conditions:

- Standard
- Air-Duct

Standard: This application parameter set, which is ideal for normal office | hotel-lobby-type applications, is the default setting.

Air-Duct: This application parameter set is used when the detector is used a UL268A (DI) compliant, direct in-air duct application without a duct housing.

Model OP921 does not require a field sensitivity test. Model OP921 is UL Listed as a self-testing device and complies with NFPA 72 as a self-monitoring detector and control-panel arrangement.
This parameter set is also used when Model OP921 is used in air-duct housings (Models FDBZ492 and FDBZ492-HR).

A quick visual inspection is sufficient to indicate the condition of Model OP921 at any time.
If more detailed information is required, a printed report can be provided from the compatible FACP, indicating the status and settings assigned to each individual detector. When Model OP921 moves to `Alarm' mode, the detector will flash RED and continue flashing until the system is reset at the FACP.

At that same time, any user-defined, system-alarm functions programmed into the system are activated.

Model OP921 contains a tri-color LED indicator, capable of flashing any one (1) of three (3) distinct colors: GREEN | YELLOW | RED.
During each flash interval, the microprocessor-based detector monitors the following scenarios:

- Smoke sensitivity is within the range indicated on the nameplate label
- Smoke in its sensing chamber
- Internal sensors and electronics are functional

Based on the results of the monitoring, the LED indicator flashes the following:

FLASH COLOR	CONDITION	FLASH INTERVAL [in seconds]
GREEN*:	Normal supervisory operation. Smoke sensitivity is within rated limits.	10
YELLOW:	Detector is in trouble and needs replacement.	4
RED:	`Alarm' condition	1
NO FLASH:	Detector is not powered.	–

* denotes LED can be turned OFF
Please follow the corresponding description of the panel used.

A quick visual inspection is sufficient to indicate the condition of the detector at any time.
If more detailed information is required, a printed report can be provided from the respective Cerberus PRO Modular | FireFinder XLS/V | FC/FV9–series FACP that indicates the status and settings assigned to each individual detector.

Installation

All Model OP921 intelligent, addressable detectors use a surface-mounting base (Model DB-11 or DB-11E), which mounts on a 4-inch (10.2 cm.) octagonal, square or single-gang electrical back box. The base utilizes screw-clamp contacts for electrical connections and self-wiping contacts for increased reliability.

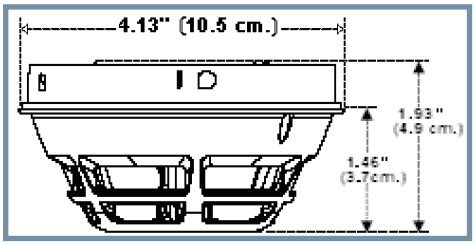
The Model DB-11 detector base can be used with the optional Siemens Model LK-11 detector locking kit, which contains 50 detector locks and an installation tool to prevent unauthorized removal of the detector head. Model DB-11 has aesthetically conducive plugs to cover the outer mounting-screw holes.

Model OP921 may be installed on the same initiating circuit with the Siemens Model `H'-series detectors [when used with Cerberus PRO Modular | FireFinder XLS/V | FC/FV9–series FACPs] –

Each detector, which is shipped with a protective dust cover, consists of the following:

- Built-in **ISO*technology*** for True-Class-X SLC performance
- Dust-resistant photoelectric chamber
- Microprocessor-based electronics with a low-profile plastic housing

Dimensional Data



All Model OP921 intelligent, addressable detectors are approved for operation with the Underwriters' Laboratories-specified temperature range of 32° to 100°F (0° to 38°C). (See: installation manual **P/N — A6V10323928** for further details)

Application Data

- XTRI series interface modules
- HTRI series interface modules
- HMS & XMS series manual stations
- HFP-11, HFPT-11 detection devices
- HCP output-control module
- HZM conventional zone module

Installation of Model OP921 smoke detectors require a two-wire circuit. In many retrofit cases, existing wiring may be used. `T-tapping' is permitted only for Style 4 (Class B) wiring. Model OP921 is polarity insensitive, which can greatly reduce installation and debugging times. When operating in NFPA 72 Class-X applications SLC polarity must be maintained to support up to 252 isolation ready devices per loop. When used in mixed mode a maximum of 30 non-isolated devices between isolation devices (wired in polarity-insensitive mode). See control panel install document for further details.

Model OP921 detectors can be applied within the maximum 30-feet center spacing (900 sq. ft. areas) as referenced in NFPA 72. This application guideline is based on ideal conditions – specifically, smooth ceiling surfaces, minimal air movement, and no physical obstructions between potential fire sources and the actual detector. Do not mount detectors in close proximity to ventilation or heating and air conditioning outlets. Exposed joists or beamed ceilings may also affect safe spacing limitations for detectors.

Should questions arise regarding detector placement, observe NFPA 72 guidelines. Good fire-protection-system engineering and common sense dictate how and when fire detectors are installed and used. Contact your local Siemens – Fire Safety distributor or sales office whenever you need assistance applying Model OP921 in unusual applications. Be sure to follow NFPA guidelines and UL Listed / ULC Listed installation instructions – included with every Siemens – Fire Safety detector – and local codes as for all fire protection equipment.

Field-Device Programmer / Test Unit

Model OP921 is compatible with the Siemens field-device programmer / test unit (Model 8720 | DPU), which is a compact, portable menu-driven accessory for electronically programming and testing these addressable detectors promptly and reliably. For instance, the field technician selects the accessory's program mode, and enters the desired address.

Model DPU eliminates the need for cumbersome, unreliable mechanical programming methods (e.g. – dials and rotary switches), and reduces installation and service costs by electronically programming and testing the detector prior to installation. When set in `test' mode, Model DPU will perform a series of diagnostic tests without altering the address or other stored data, allowing technicians to determine if the detector is operating properly.

Each field-device programmer / test unit operates on AC power or rechargeable batteries, providing flexibility and convenience in the programming / testing of fire-safety equipment from practically any location. Additionally, with the use of a Model DPU unit, there is no longer a cause for concern with any vibration, corrosion and other deteriorating conditions that can accompany the vitality of electro-mechanical-addressing mechanisms.

Each detector fits into one (1) wall-or-ceiling footprint, and only occupies one (1) address on the signal-line circuit (SLC).

Technical Data

OPERATING TEMPERATURE:	+32° – +100°F (0° – +38°C)
RELATIVE HUMIDITY:	0 – 95% (non-condensing)
AIR PRESSURE:	No effect
AIR VELOCITY:	0 – 4,000 feet-per-minute (fpm) (0 – 20 meters-per-second)
INPUT VOLTAGE RANGE:	16VDC – 30VDC
`ALARM' CURRENT, MAX.:	410µA
`STANDBY' CURRENT, MAX.:	250µA
MAXIMUM SPACING:	30–ft. centers (900 sq. ft.), per NFPA 72
DETECTOR WEIGHT:	0.317 Lbs. (0.144 kg.)
MECHANICAL PROTECTION GUARD:	UL and ULC Listed (with STI Guard Model STI-9604)
SENSITIVITY RANGE:	1.41 - 3.76 % ft obs. (Nominal 2.0% / ft. obs.)

Panel Compatibilities

MODEL OR TYPE	DATA SHEET	PANEL
XLS	6300	FireFinder® (fire)
XLSV	6340	FireFinder (fire w/ voice)
Cerberus PRO Modular	8300	System Overview
FC901	9813	Cerberus PRO 50-point addressable
FC922	9815	Cerberus PRO 252-pt. addressable (fire)
FC924		Cerberus PRO 504-pt. addressable (fire)
FV922	9821	Cerberus PRO 252-point addressable (fire w/ Intelligent Voice Communication [IVC])
FV924		504-pt. addressable (fire w/ Intelligent Voice Communication [IVC])

Details for Ordering

MODEL OR TYPE	PART NUMBER	PRODUCT
OP921	S54320-F4-A2	Photoelectric Smoke Detector

Compatible Devices:

MODEL OR TYPE	PART NUMBER	PRODUCT
DB-11	500-094151	Detector Mounting Base
DB-11E	500-094151E	Detector Base, small
DB2-HR	S54370-F12-A1	Detector Mounting Base with Relay
RL-HC	500-033230	Remote Alarm Indicator: 4" (10.2 cm) octagon.-box mount, red
RL-HW	500-033310	Remote Alarm Indicator: single-gang box mount, red
FDBZ492	S54319-B22-A1	Addressable Air-Duct Housing
FDBZ492-HR	S54319-B23-A1	Addressable Air-Duct Detector with Relay
LK-11	500-695350	Base Locking Kit

See: www.STI-USA.com for further details on ordering Model STI-9604

In Canada order:

MODEL OR TYPE	PART NUMBER	PRODUCT
DB-11C	500-095687	Detector Mounting Base, ULC Listed

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice.
The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

Cerberus® PRO

Siemens Industry, Inc.
Smart Infrastructure - Building Products
2 Gatehall Drive • Parsippany, NJ 07054
Tel: (973) 593-2600

July - 2023
(Rev. 13)

SIEMENS

Cerberus® PRO
Specialized Detection Devices

'DB' Series Detector Bases
Models DB2-HR, DB-11 and DB-11E

Architect & Engineer Specifications

- ☐ Each detector base supports Isolation field wiring for ISO*technology* feature
- ☐ All bases compatible with optional Model LK-11 detector-locking kit
- ☐ Each detector base also functions with the addressable Models OH921, OP921, OOH941, OOHC941 and HI921 intelligent detectors
- ☐ Model DB2-HR is compatible with ASA*technology* multi-criteria detectors
- ☐ Each detector base is compatible with Model 'H', "11" and "121" series of conventional detectors
- ☐ Model DB2-HR has backwards compatibility with Siemens Model 'H'-series intelligent detectors
- ☐ Models DB-11 and DB-11E mount on a 4-inch octagon, square or single-gang electrical box
- ☐ Model DB-11 has plugs to cover the outer-mounting screw holes
- ☐ Model DB2-HR mounts on a 4"-square, double-gang electrical box
- ☐ UL268 Listed, ULC-S529 Listed
- ☐ FM, CSFM and NYC Fire Department Approved

Product Overview

The detector bases are low-profile, surface mounting bases used with various Siemens – Fire Safety conventional and addressable detectors. Model DB2-HR, which is a redesign of Model DB-HR, is compatible with the standard, addressable type of intelligent detectors, as well as the multi-criteria detection devices utilizing the patented ASA*technology*.™

Model DB2-HR supports operation with Siemens' 50-point addressable; 252-point addressable; 504-point addressable, and FireFinder® XLS / Modular fire systems. A relay output from the fire detector base for signaling other devices is provided by Model DB2-HR.

The detector bases use screw-clamp contacts for electrical connections and self-wiping contacts for increased reliability. Further, the bases can be used with the optional Model LK-11 detector locking kit, which contains 50 detector locks and an installation tool, to prevent unauthorized removal of the detector head.

Specifications

Models DB-11 and DB-11E are standard bases for Model 'H'-series "11" and Model "121"-series conventional detectors. Model DB-11 has a 6" (15.2 cm) diameter, and the diameter for Model DB-11E is 4.5 inches (11.4 cm).

Moreover, Models DB-11 and DB-11E mount on a 4"-square, (10.2 cm) octagon or single-gang box. Model DB-11 has integral, decorative plugs to cover the outer screw holes.

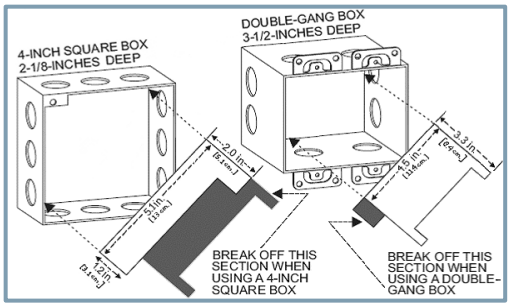
However, Model DB2-HR mounts on a double-gang, 4-inch (10.2 cm.) square electrical box.

Model DB-11

Model DB2-HR

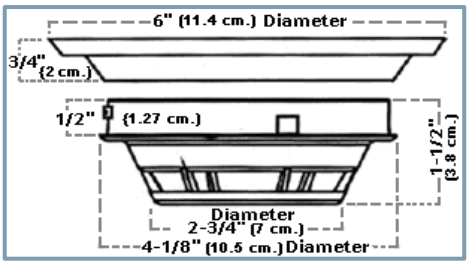
Model DB-11E

Mounting Diagram



Model DB2-HR

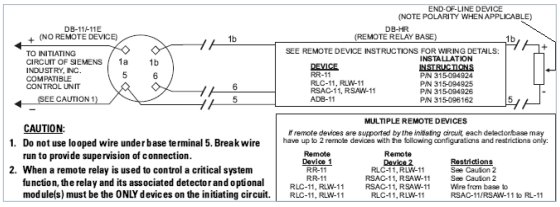
Dimensions



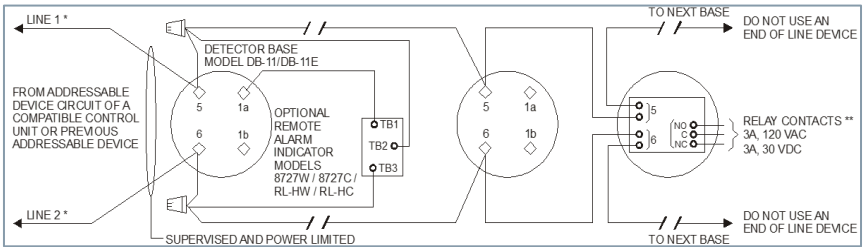
Model DB-11

Note: The Model DB-11E base detector has a diameter dimension of 4.5" (11.4 cm).

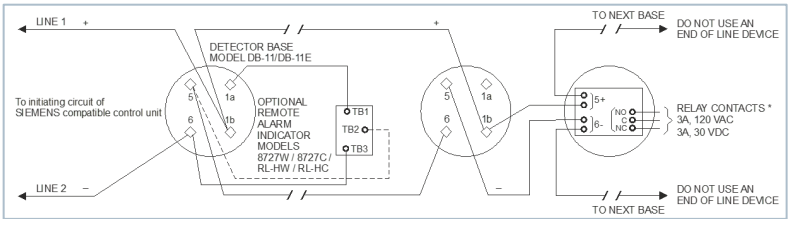
Wiring Diagrams



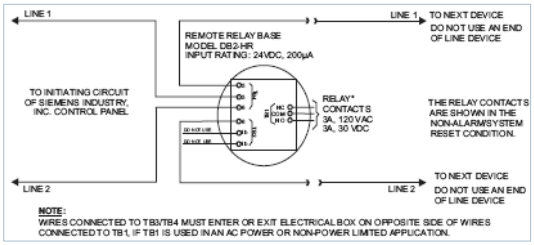
Note: The illustration above is typical wiring for Models DB-11 and DB-11E (using Models OH121, OP121, and HI121 detectors).



Note: The illustration above is typical polarity insensitive wiring for Models DB-11 and DB-11E (using Models HI921 / OH921 / OOH941 / OOHC941 / OP921 detectors).



Note: The illustration above is typical isolator mode wiring for Models DB-11 and DB-11E (using Models HI921 / OH921 / OOH941 / OOHC941 / OP921 detectors).



Note: The illustration above is typical wiring for Model DB2-HR for polarity-insensitive detectors.

Details for Ordering

MODEL OR TYPE	PART NUMBER	PRODUCT
DB-11	500-094151	Low-Profile Surface-Mount Base
DB-11C	500-095687	Low-Profile Surface-Mount Base [Canada]
DB-11E	500-094151E	Smaller-Diameter Detector Base
DB-HR	500-033220	Relay Base for 'H'-Series Intelligent Detector
DB2-HR	S54370-F12-A1	Relay base compatible with standard and advanced detectors; backwards compatible with Model 'H'-series intelligent detectors
HI921	S54320-F5-A2	Thermal (Heat) Detector
OH921	S54320-F6-A2	Addressable Multi-Criteria Fire Detector
OP921	S54320-F4-A2	Photoelectric Smoke Detector
OOH941	S54320-F7-A2	Multi-Criteria Fire Detector with ASA*technology*™
OOHC941	S54320-F8-A2	Multi-Criteria Fire / CO Detector with ASA*technology*™
LK-11	500-695350	Base Locking Kit for Model '11'-series detectors
HI121	S54372-F3-A1	Heat Detector
OH121	S54372-F2-A1	Multi-Sensor Smoke Detector
OP121	S54372-F1-A1	Photoelectric Smoke Detector

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice.
The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

Cerberus® PRO

Siemens Industry, Inc.
Smart Infrastructure - Building Products
2 Gatehall Drive • Parsippany, NJ 07054
Tel: (973) 593-2600

April - 2023
(Rev. 2)

SIEMENS

Peripheral and Detection Devices
Initiating Device

Intelligent Device Interface Modules
Model XTRI-D I XTRI-R I XTRI-S

Architect & Engineer Specifications

- ☐ Siemens ISO*technology*™
  - Provides "True Class–X" operation meeting NFPA 72 SLC field wiring requirements
  - Supports 252 ISO*technology* ready devices per loop, and in mixed mode up to 30 devices between isolated devices
- ☐ Dual input on Model XTRI-D, via a single address
- ☐ Integral single-pole, double-throw (SPDT) relay on Model XTRI-R:
  - Up to 4 Amps.
- ☐ Low current draw
- ☐ Polarity insensitive (in non-isolation mode) via *SureWire*™ technology:
  - Modern technology supports comprehensive system and interface communication
- ☐ Multi-color light-emitting diode (LED) indicates system status: GREEN | AMBER | RED
- ☐ Mounts in a 4-inch (10.2 cm.) square, 2–¼" (5.7 cm.) deep single-gang or double-gang back box
- ☐ Non-obstructive front-end access to programming port and wiring terminals
- ☐ Device Programmer | Test Unit programs and verifies address, as well as tests device functionality
- ☐ Restriction of Hazardous Substances (RoHS) compliant
- ☐ UL864 | UL2572 | UL2017 Listed; CAN/ULC-S527 & CAN/ULC-S576 Listed
  - File S24304, Vol. 3
- ☐ FM Approved

Product Overview

The Siemens – Fire Safety XTRI-series Intelligent Interface Modules are designed to provide the means of interfacing direct shorting devices to the fire-alarm control panel (FACP) SLC. All modules take up one (1) address on the loop.

Each XTRI-series interface module provides the "built-in" **ISO*technology*** feature - intelligent dual isolation meeting NFPA 72 Class X (Style 7) wiring requirements. Up to 252 isolators per loop and up to 30 devices between isolators (wired in polarity-insensitive mode). Additionally, the devices between isolators can either be 'H'-series or the more contemporary 'X'-series detection devices.

Specifications

The Siemens – Fire Safety XTRI-series Intelligent Interface Modules are available in three (3) individual types:

- One (1) Dual-Input: XTRI-D
- Two (2) Single-Inputs: XTRI-R (with relay) | XTRI-S
  - The single-input versions are each designed to monitor a normally open (N.O) or (N.C) normally closed dry contact

XTRI-D | XTRI-R | XTRI-S incorporates **ISO*technology*** – the configurable, built-in dual isolator function. Additionally, an XTRI-series interface module supports NFPA 72 Class X (Style 7) survivability requirements for shorts while providing reliable alarm communication to the Siemens FACP. The isolation feature found on the XTRI-series Intelligent Interface Modules gives information as to the location of the fault. When a short occurs, the panel can identify the fault automatically, and the module recognizes the short location (in front of the device or behind the device). Overall, the built-in isolators improve the diagnostics and location of the problem, including a short.

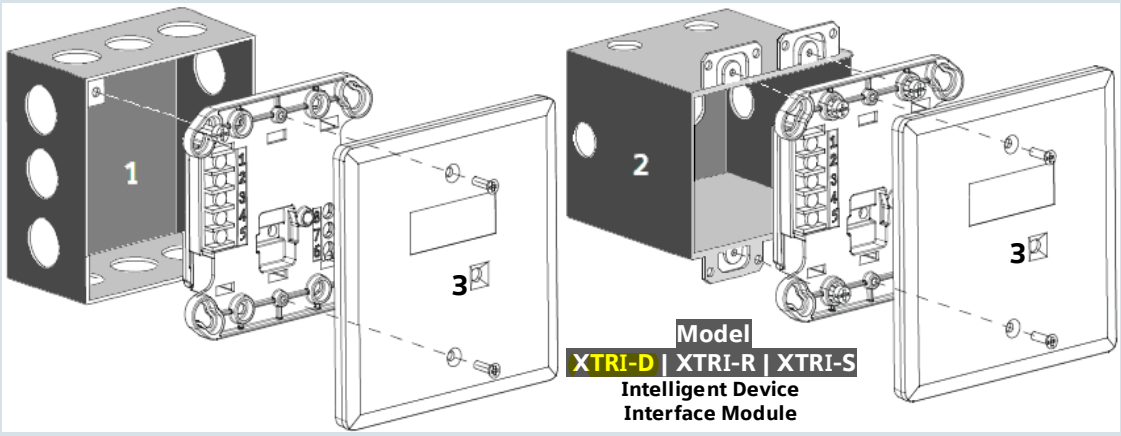
The modules are configurable by a Siemens compatible FACP (or panels) in an isolator (polarity sensitive) or non-isolator (polarity insensitive) mode. When a XTRI-series interface module is configured as an isolator, that module has the capacity of functioning as both an in/out device, as well as an isolator.

Advanced troubleshooting is provided by compatible panels by identifying when a XTRI-series interface module is configured as an isolator, but is wired incorrectly in a polarity-insensitive mode.

Each Model XTRI-series device has a multi-color LED that flashes when GREEN operating in Normal mode; AMBER if the unit is in a `Trouble' condition, and RED to indicate a change of status.

Model XTRI-S
This single-input interface module can only monitor and report the status of a N.O. or N.C. contact.

Model
XTRI-D | XTRI-R | XTRI-S
Intelligent Device Interface Module



1. 4" (10.2 cm.) square box | 2– 1/8" (5.4 cm.) back box
2. 3.5" (8.9 cm.) double -gang back box
3. 5" (12.7 cm.) square switch plate, supplied)

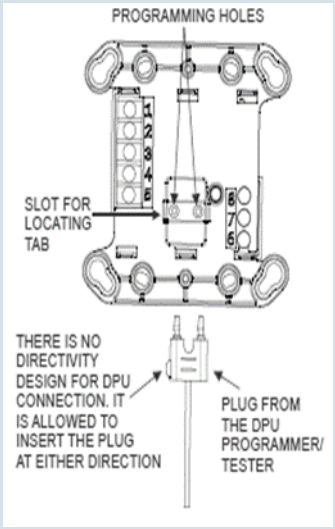
Specifications (cont.)

Model XTRI-R

Through the use of an addressable 'Form C' relay, the Model XTRI-R relay and contact device input are controlled at the same address. The relay and input contact can be controlled as a separate function from a Siemens compatible FACP. The relay is typically used where control or shunting of external equipment is required.

Model XTRI-D

Model XTRI-D is a dual-input module that is designed to supervise and monitor two (2) sets of dry contacts. Model XTRI-D only requires one (1) address, but responds independently to each input. Model XTRI-D is ideal for monitoring a water-flow switch and its respective valve tamper switch.



NOTES:
Each interface module mounts directly to a user-supplied switchbox.
The electrical boxes, seen above, are supplied-by-others (BO).

Models XTRI-D, XTRI-R and XTRI-S mount directly onto a 4-inch (10.2 cm.) square, 2 ¼" (5.7 cm.)– deep box back box, or to a user-supplied double-gang 3 ½" deep back box.

A 5" (12.7 cm.) square, off-white faceplate is included in each shipment of a Siemens Model XTRI-series module.

Operation

Field-Device Programmer / Test Unit

Siemens – Fire Safety innovative technology allows Model XTRI-series intelligent interface modules to be programmed via the Siemens field-device programmer / test unit (Model DPU), which is a compact, portable and menu-driven accessory for electronically programming and testing Siemens peripheral modules and devices promptly and reliably. For instance, the field technician selects the accessory's program mode, and enters the desired address.
Model XTRI-series interface module is connected to Model DPU with the programming cable provided with the tester.

NOTE: Since the XTRI-series of interface modules are advanced initiating devices, the latest Model DPU firmware update is required.

Model DPU eliminates the need for cumbersome, unreliable mechanical programming methods (e.g. – dials and rotary switches), and reduces installation and service costs by electronically programming and testing the module prior to installation. When set in `test' mode, Model DPU will perform a series of diagnostic tests without altering the address or other stored data, allowing technicians to determine if the module is operating properly.
Each field-device programmer / test unit operates on AC power or rechargeable batteries, providing flexibility and convenience in the programming / testing of fire-safety equipment from practically any location. Additionally, with the use of a Model DPU unit, there is no longer a cause for concern with any vibration, corrosion and other deteriorating conditions that could negatively affect any electro-mechanical-addressing mechanism.

Compatibilities

Siemens `X' modules may be used along with Model `H'-series intelligent detectors; Model `HMS'-series addressable manual stations, or any other `H'-series addressable intelligent module (e.g. Model HZM or Model HCP). Additionally, the X-series modules are compatible with all Desigo and Cerberus Pro detectors and peripherals of the same circuit.

Interspersing `X' & `H'-series devices on the same loop is mostly permitted, but there are exceptions: Models HLIM (isolation module) and SBGA-34 (audible base) cannot be used with `X' devices on the same loop.

Temperature and Humidity Range

Models XTRI-D | XTRI-R | XTRI-S intelligent interface modules are UL Listed | ULC Listed. Environmental operating conditions for each interface module is 32°F (0°C) to 120°F (49°C) with a relative humidity of no greater than 95%, non-condensing.

LED Iindicators

FLASH COLOR	CONDITION	FLASH INTERVALS [in seconds]
GREEN*:	Normal supervisory operation	10
YELLOW:	Device is in trouble and needs to be replaced	4
RED:	Locate | `Alarm'	1
	Output Device (XTRI-R only)	10
NO FLASH:	Power is not being received / Replacement is needed	–

Technical Data

OPERATING VOLTAGE RANGE:	13VDC – 32VDC	
RELATIVE HUMIDITY:	0 – 95% (non-condensing)	
`ACTIVE' OR `STANDBY' CURRENT, MAX.:	500µA	
LINE SIZES AMERICAN WIRE GAUGE (AWG)	14 AWG, max. 18 AWG, min.	
CURRENT DRAW MAX | AVG.	XTRI-S	650µA
	XTRI-R	750µA
	XTRI-D	950µA
RELAY RATINGS: (for Model XTRI-R)		
RESISTIVE:	4 Amps | 125 VAC	
	4 Amps | 30 VDC	
INDUCTIVE:	3.5A, 120 VAC (0.6 pF)	
	3.0A, 30 VDC (0.6 pF)	
	2.0A, 120 VAC (0.4 pF)	
	2.0A, 120 VAC (0.35 pF)	
	2.0A, 30 VDC (0.35 pF)	

Details for Ordering

MODEL OR TYPE	PART NUMBER	PRODUCT
XTRI-S	S54370-B3-A1	Single Input Module
XTRI-R	S54370-B1-A1	Single Input Module (with relay)
XTRI-D	S54370-B2-A1	Dual Input Module
DPU	500-033260	Device Programmer / Test Unit

NOTE: Refer to installation manual: P/N – A6V101055479 to ensure Model XTRI-D | XTRI-R | XTRI-S compatibility with the Siemens FACPs intended for use in the given application.

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice.
The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

Siemens Industry, Inc.
Smart Infrastructure - Building Products
2 Gatehall Drive • Parsippany, NJ 07054
Tel: (973) 593-2600

October - 2023
(Rev. 5)

Notification Appliances

'SL2' Series – Horns | Strobes | Horn-Strobes

Applications: Indoor, Ceiling-Only

Architect & Engineer Specifications

- ☐ Sophisticated series of notification appliances that meets fire-industry codes and regulations for commercial-building applications
- ☐ Compatible with the Siemens 50-point, 252-point and 504-point addressable fire alarm control panels (FACPs), and with:
  - Siemens Modular FACPs
  - Siemens PAD-series of NAC extenders
  - FireFinder® XLS / XLSV FACPs
  - Siemens dual-sync control (DSC) modules
- ☐ Innovative LED strobe technology provides an energy-efficient means for a significantly reduced current draw
  - Capability to have existing Xenon and new LED strobes in the same field-of-view
  - Fewer power supplies required, smaller wire gage, reduced wire runs
- ☐ Straightforward installation coupled with compact, modern design
  - No visible mounting screws
  - Manual (index finger) slide-setting adjustor
  - Six (6) field-selectable settings in one (1) device: 15cd | 30cd | 75cd | 110cd | 150cd | 177cd
- ☐ Faceplates ship in four (4) distinctive types:
  - 'FIRE' | 'ALERT' | 'AGENT' | 'NO LETTERING'
- ☐ Two (2) audible settings in each notification appliance
  - Temporal or steady horn output
  - High or Low setting
- ☐ UL1638 | UL1971 | UL464 Listed
- ☐ ULC-S525-16 | ULC- S526-16 Listed
- ☐ FM & CSFM Approved

Product Overview

Formed as the `SL2'-series, Siemens is now offering horns, strobes, and horn-strobes with LED based strobes to its notification-appliances portfolio. With the `SL2'-series, Siemens offers a full range of products with low and high candela settings that makes these sophisticated notification appliances ideal for new installs and retrofit applications.

Innovative light-emitting diode (LED) strobe technology provides an energy-efficient means for a significantly reduced current draw.

The strobe portion of these appliances meets the 20 millisecond light-pulse-duration requirements of the 2016 edition of NFPA 72. This feature allows existing Xenon and the new LED devices to be used in the same field-of-view.

In a single device, the `SL2'-series can provide alarm-signaling tones for dual applications. All strobe models in the series feature multi-Candela settings (15cd | 30cd | 75cd | 110cd | 150cd | 177cd) on a single appliance.

Additionally, there are three (3) modes of operation for the audible portion of these notification appliances:

- Continuous(Code 3 field selectable)
- T3 (Code 3 Sync)
- T3/T4 (Sync Selectable w/DSC)

The `SL2'-series of horns, strobes and horn-strobes devices are produced in a sleek, modern design. Its single-gang form factor provides high-quality energy efficiency in an aesthetically pleasing, low-profile design that is consistent to the look of the interior composition of the building application.

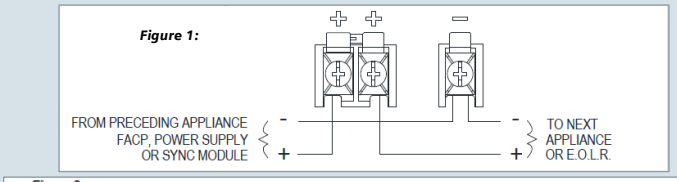
The Model `SL2HC'-series horn appliances work in either 12V or 24VDC, whereas the Series `SL2SC' and `SL2HSC' strobe and horn-strobe devices are specifically designed for 24V operation. The `SL2'-series is apt for indoor, ceiling-mount applications.

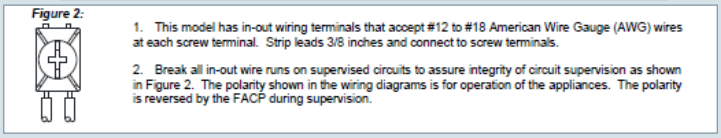
Model SL2HCW-N
Horn

Model SL2SCR-F
Strobe

Model SL2HSCW-F
Horn-Strobe

Wiring Diagrams





SL2HC, SL2SC , SL2HSC
Horns | Strobes | Horn-Strobes

Specifications

In terms of composition and functionality, Models `SL2HC'-series, `SL2SC'-series, and `SL2HSC'-series of horns, strobes and horn-strobe appliances provide added value to the installer for the types of applications for operation:

- Compact | sleek | low-profile design
- Comprehensive feature list
- Convenient mounting options
- Easy-to-adjust selection-slider switch for Candela settings
  - No tools required for setting changes
  - Multi-level settings: 15cd | 30cd | 75cd | 110cd | 150cd | 177cd
- High and Low audible outputs
- Reduced current draw, via cutting-edge LED technology

The LED portions of the Siemens `SL2'-series of strobes and horn-strobes meet the 20 millisecond light-pulse-duration requirements of the 2016 edition of NFPA 72. By meeting this latest requirement, existing Xenon as well as the new LED-technology devices can now be in the same field-of-view.

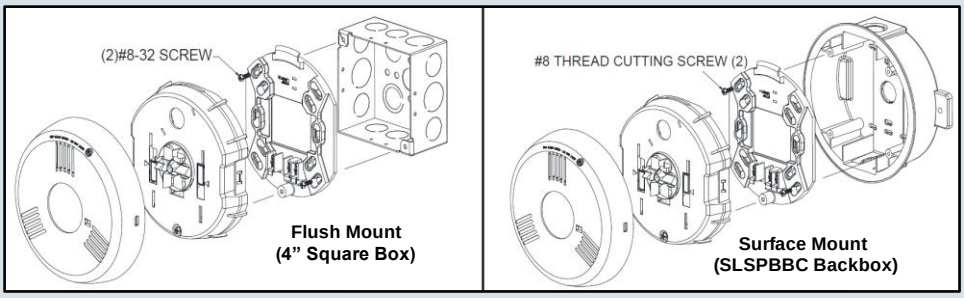
The Horns, Strobes and Horn-Strobes in this Siemens `SL2'-series of notification appliances have received UL / ULC Listed status by attaining compatible testing standards with all Siemens fire-alarm control panels (FACPs) and accessories that have been determined to be aligned with existing Siemens strobe-based appliances.

This would include the following existing model-types: ST | SE | SEH | SET | S-HQ | STH | AS | CH | HS | MTH | SL and Z- Series notification appliances. The regulatory listing also includes the capability for installing the Siemens `SL2'-series LED-based strobes in the same notification zone and field-of-view with any existing Siemens Notification Appliance Xenon-based strobes.

All types of the 'SL2'-Series horns, strobes and horn-strobe appliances are UL / ULC Listed for indoor use.

Horn: UL464, ULC-S525-16 | Strobe: UL1638, UL1971, CAN/ULC-S526-16

Mounting Diagrams



Mounting Options Include:

- Model SLSPBBC to any single-gang backbox
- 4" (10.2 cm.) square backboxes

Technical Data

Horn-Strobes | Output Current Draw

Model SL2HSC' Series:^	Current Ratings (Amps @ 24V) HIGH dB						
	Setting	15cd	30cd	75cd	110cd	150cd	177cd
	CONT T3 T3/T4	0.037	0.046	0.077	0.109	0.146	0.208

Model SL2HSC' Series:^	Current Ratings (Amps @ 24V) LOW dB						
	Setting	15cd	30cd	75cd	110cd	150cd	177cd
	CONT T3 T3/T4	0.030	0.039	0.070	0.102	0.139	0.201

Horn-Only | Output Current Draw

Model 'SL2HC' Series:^	Current Ratings (Amps) RMS Current @ 24VDC		
	Regulated Voltage Range	High	Low
	12VDC (8-17.5V)	0.025	0.020
	24VDC (16-33V)	0.028	0.021

Strobe-Only | Output Current Draw

Model SL2SC' Series:^	Current Ratings (Amps)					
	Regulated Voltage Range					
	16.0 – 33.0 VDC			16.0 – 33.0 VRMS		
	15cd	30cd	75cd	110cd	150cd	177cd
	0.022	0.030	0.060	0.086	0.125	0.185

Horn | Output Ratings (UL)

Model SL2HC'– and – SL2HSC' Series:^	UL Sound Output Ratings (dBA) Reverberant per UL464 @ 10 feet		
	Setting	SL2HC @ 12VDC	SL2HC & SL2HSC @ 24VDC
	CONT | T3| | T3/T4	High dBA	High dBA
		80	80
	CONT | T3| T3/T4	Low dBA	Low dBA
		78	78

Horn | Output Ratings (ULC)

Model SL2HC'– and – SL2HSC' Series:^	ULC Sound Output Ratings (dBA) Anechoic per ULCS525-16 @ 3.05 meters		
	Setting	SL2HC @ 12VDC	SL2HC & SL2HSC @ 24VDC
	CONT | T3| | T3/T4	High dBA	High dBA
		85	91
	CONT | T3| | T3/T4	Low dBA	Low dBA
		79	86

^ RMS current ratings are per UL maximum RMS method.
UL max current rating is the maximum RMS current within the listed voltage range (16 - 33V for 24V
^ For audible appliances, the max current is usually at the maximum listed voltage (16 - 33V for 24V units)
^ For unfiltered FWR ratings, see installation instructions

GENERAL NOTES:

1. Strobes are designed to flash at 1-flash-per-second minimum over their " Regulated Voltage Range."
2. NFPA-72 specifies a flash rate of 1-to-2 flashes-per-second.
3. All Candela ratings represent minimum effective Strobe intensity based on UL 1971.

Technical Data

General Properties

	MODEL `SL2'-series
OPERATING TEMPERATURE:	- 32°F (0°C) to 122°F (50°C) - for indoor use only
RELATIVE HUMIDITY:	93%, maximum
OPERATING VOLTAGE RANGES:	- 12 VDC / VFWR → 8.0 - 17.5 V - 24 VDC / VFWR → 16.0 – 33.0 V (12 VDC for Model SL2HC only)
STROBE OUTPUT RATING:	- UL 1638, 1971 | ULC-S526-16 - Field-selectable 15cd | 30cd | 75cd | 110cd | 150cd | 177cd Candela outputs
STROBE FLASH RATE:	Strobes are designed to flash at one-flash-per-second
STROBE SYNCRONIZATION:	- all Siemens Addressable Panels - Siemens PAD-series NAC extenders - Siemens Dual-Sync (DSC) modules, which provide the unique Siemens proprietary synchronization protocol
TEMPORAL PATTERN:	- Continuous - Code 3 (1/2 second on, 1/2 second off; then 1/2 second on, 1/2 second off; followed by 1/2 second on, 1-1/2 second off and repeat) NOTES: The Code 3 pattern is specified by ANSI and NFPA 72 for Standard Emergency Evacuation Signaling.

Physical Properties

	MODEL `SL2'-series
MATERIAL:	- White-or-red textured, ultraviolet (UV) stabilized, colored impregnated engineered plastic - Exceeds 94V-0 UL flammability rating
WEIGHT:	0.55 Lbs. (0.24 Kg.)
LENS TYPE:	LED strobe situated in a rugged Lexan lens
DIMENSIONS:	Horns: 6.27"(15.9 cm.) x 6.27"(15.9 cm.) x 1.32" (3.35 cm.) Horn-Strobes: 6.27"(15.9 cm.) x 6.27"(15.9 cm.) x 1.69" (4.29 cm.)

Mounting and Wiring Properties

	MODEL `SL2'-series
INDOOR MOUNTING:	- Ceiling-mount applications - Model SLSPBBC to any Single-Gang Backbox or to 4" (10.2 cm.) Square Box
WIRING TYPE:	#12 – #18, American Wire Gauge (AWG)

Details for Ordering

MODEL	PART NUMBER	APPLIANCE TYPE	MOUNTING TYPE	STROBE TYPE	FACEPLATE COLOR	FACEPLATE LETTERING
SL2HCR-N	S54329-F83-A1	Horn	CEILING	– None –	RED	– No Lettering –
SL2HCW-N	S54329-F84-A1		CEILING	– None –	WHITE	– No Lettering –
SL2HSCR-A	S54329-F87-A1	Horn-Strobe	CEILING	Clear	RED	AGENT
SL2HSCW-A	S54329-F92-A1		CEILING	Clear	WHITE	AGENT
SL2HSCR-AL	S54329-F88-A1	Horn-Strobe	CEILING	Clear	RED	ALERT
SL2HSCW-AL	S54329-F93-A1		CEILING	Clear	WHITE	ALERT
SL2HSCR-F	S54329-F89-A1	Horn-Strobe	CEILING	Clear	RED	FIRE
SL2HSCW-F	S54329-F94-A1		CEILING	Clear	WHITE	FIRE
SL2HSCR-N	S54329-F90-A1	Horn-Strobe	CEILING	Clear	RED	– No Lettering –
SL2HSCW-N	S54329-F95-A1		CEILING	Clear	WHITE	– No Lettering –
SL2HSCR-FB	S54329-F91-A1	Horn-Strobe	CEILING	Clear	RED	– Pictogram –
SL2HSCW-FB	S54329-F96-A1		CEILING	Clear	WHITE	– Pictogram –
SL2SCR-ALA	S54329-F182-A1	Strobe	CEILING	Amber	RED	ALERT
SL2SCW-ALA	S54329-F191-A1		CEILING	Amber	WHITE	ALERT
SL2SCR-NA	S54329-F183-A1	Strobe	CEILING	Amber	RED	– No Lettering –
SL2SCW-NA	S54329-F192-A1		CEILING	Amber	WHITE	– No Lettering –
SL2SCR-ALB	S54329-F184-A1	Strobe	CEILING	Blue	RED	ALERT
SL2SCW-ALB	S54329-F193-A1		CEILING	Blue	WHITE	ALERT
SL2SCR-NB	S54329-F185-A1	Strobe	CEILING	Blue	RED	– No Lettering –
SL2SCW-NB	S54329-F194-A1		CEILING	Blue	WHITE	– No Lettering –
SL2SCR-A	S54329-F186-A1	Strobe	CEILING	Clear	RED	AGENT
SL2SCW-A	S54329-F195-A1		CEILING	Clear	WHITE	AGENT
SL2SCR-AL	S54329-F187-A1	Strobe	CEILING	Clear	RED	ALERT
SL2SCW-AL	S54329-F196-A1		CEILING	Clear	WHITE	ALERT
SL2SCR-F	S54329-F188-A1	Strobe	CEILING	Clear	RED	FIRE
SL2SCW-F	S54329-F198-A1		CEILING	Clear	WHITE	FIRE
SL2SCR-N	S54329-F189-A1	Strobe	CEILING	Clear	RED	– No Lettering –
SL2SCW-N	S54329-F200-A1		CEILING	Clear	WHITE	– No Lettering –
SL2SCR-FB	S54329-F190-A1	Strobe	CEILING	Clear	RED	– Pictogram –
SL2SCW-FB	S54329-F201-A1		CEILING	Clear	WHITE	– Pictogram –
SL2SCW-EV	S54329-F197-A1	Strobe	CEILING	Clear	WHITE	Evacuation
SLSPBBCR	S54329-F55-A1	Backbox	CEILING	– None –	RED	– No Lettering –
SLSPBBCW	S54329-F55-A2		CEILING	– None –	WHITE	– No Lettering –

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice. The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product. All are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

Siemens Industry, Inc.
Smart Infrastructure – Building Products
2 Gatehall Drive • Parsippany, NJ 07054
Tel: (973) 593-2600

October - 2023
(Rev. 2)

Notification Appliances

'SL2' Series – Horns | Strobes | Horn-Strobes

Applications: Indoor, Ceiling-Only

Architect & Engineer Specifications

- ☐ Sophisticated series of notification appliances that meets fire-industry codes and regulations for commercial-building applications
- ☐ Compatible with the Siemens 50-point, 252-point and 504-point addressable fire alarm control panels (FACPs), and with:
  - Siemens Modular FACPs
  - Siemens PAD-series of NAC extenders
  - FireFinder® XLS / XLSV FACPs
  - Siemens dual-sync control (DSC) modules
- ☐ Innovative LED strobe technology provides an energy-efficient means for a significantly reduced current draw
  - Capability to have existing Xenon and new LED strobes in the same field-of-view
  - Fewer power supplies required, smaller wire gage, reduced wire runs
- ☐ Straightforward installation coupled with compact, modern design
  - No visible mounting screws
  - Manual (index finger) slide-setting adjustor
  - Six (6) field-selectable settings in one (1) device: 15cd | 30cd | 75cd | 110cd | 150cd | 177cd
- ☐ Faceplates ship in four (4) distinctive types:
  - 'FIRE' | 'ALERT' | 'AGENT' | 'NO LETTERING'
- ☐ Two (2) audible settings in each notification appliance
  - Temporal or steady horn output
  - High or Low setting
- ☐ UL1638 | UL1971 | UL464 Listed
- ☐ ULC-S525-16 | ULC- S526-16 Listed
- ☐ FM & CSFM Approved

Product Overview

Formed as the `SL2'-series, Siemens is now offering horns, strobes, and horn-strobes with LED based strobes to its notification-appliances portfolio. With the `SL2'-series, Siemens offers a full range of products with low and high candela settings that makes these sophisticated notification appliances ideal for new installs and retrofit applications.

Innovative light-emitting diode (LED) strobe technology provides an energy-efficient means for a significantly reduced current draw.

The strobe portion of these appliances meets the 20 millisecond light-pulse-duration requirements of the 2016 edition of NFPA 72. This feature allows existing Xenon and the new LED devices to be used in the same field-of-view.

In a single device, the `SL2'-series can provide alarm-signaling tones for dual applications. All strobe models in the series feature multi-Candela settings (15cd | 30cd | 75cd | 110cd | 150cd | 177cd) on a single appliance.

Additionally, there are three (3) modes of operation for the audible portion of these notification appliances:

- Continuous(Code 3 field selectable)
- T3 (Code 3 Sync)
- T3/T4 (Sync Selectable w/DSC)

The `SL2'-series of horns, strobes and horn-strobes devices are produced in a sleek, modern design. Its single-gang form factor provides high-quality energy efficiency in an aesthetically pleasing, low-profile design that is consistent to the look of the interior composition of the building application.

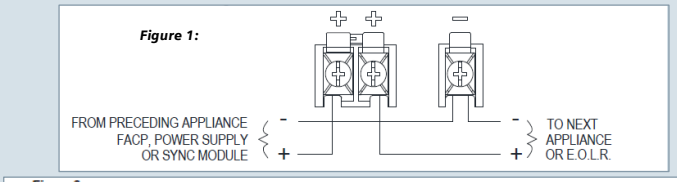
The Model `SL2HC'-series horn appliances work in either 12V or 24VDC, whereas the Series `SL2SC' and `SL2HSC' strobe and horn-strobe devices are specifically designed for 24V operation. The `SL2'-series is apt for indoor, ceiling-mount applications.

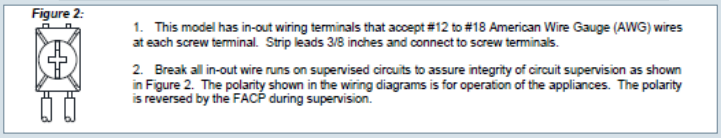
Model SL2HCW-N
Horn

Model SL2SCR-F
Strobe

Model SL2HSCW-F
Horn-Strobe

Wiring Diagrams





SL2HC, SL2SC , SL2HSC
Horns | Strobes | Horn-Strobes

Specifications

In terms of composition and functionality, Models `SL2HC'-series, `SL2SC'-series, and `SL2HSC'-series of horns, strobes and horn-strobe appliances provide added value to the installer for the types of applications for operation:

- Compact | sleek | low-profile design
- Comprehensive feature list
- Convenient mounting options
- Easy-to-adjust selection-slider switch for Candela settings
  - No tools required for setting changes
  - Multi-level settings: 15cd | 30cd | 75cd | 110cd | 150cd | 177cd
- High and Low audible outputs
- Reduced current draw, via cutting-edge LED technology

The LED portions of the Siemens `SL2'-series of strobes and horn-strobes meet the 20 millisecond light-pulse-duration requirements of the 2016 edition of NFPA 72. By meeting this latest requirement, existing Xenon as well as the new LED-technology devices can now be in the same field-of-view.

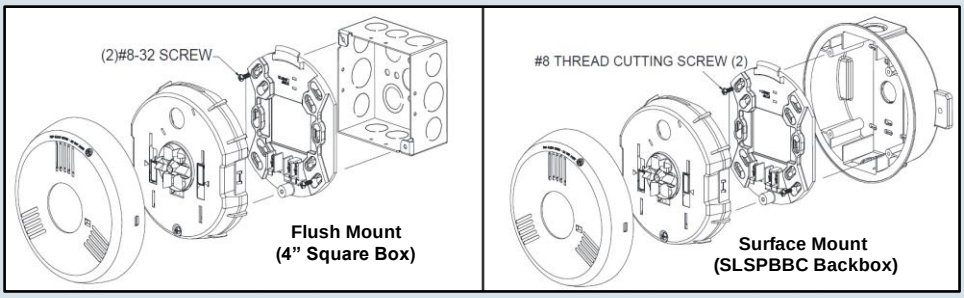
The Horns, Strobes and Horn-Strobes in this Siemens `SL2'-series of notification appliances have received UL / ULC Listed status by attaining compatible testing standards with all Siemens fire-alarm control panels (FACPs) and accessories that have been determined to be aligned with existing Siemens strobe-based appliances.

This would include the following existing model-types: ST | SE | SEH | SET | S-HQ | STH | AS | CH | HS | MTH | SL and Z- Series notification appliances. The regulatory listing also includes the capability for installing the Siemens `SL2'-series LED-based strobes in the same notification zone and field-of-view with any existing Siemens Notification Appliance Xenon-based strobes.

All types of the 'SL2'-Series horns, strobes and horn-strobe appliances are UL / ULC Listed for indoor use.

Horn: UL464, ULC-S525-16 | Strobe: UL1638, UL1971, CAN/ULC-S526-16

Mounting Diagrams



Mounting Options Include:

- Model SLSPBBC to any single-gang backbox
- 4" (10.2 cm.) square backboxes

Technical Data

Horn-Strobes | Output Current Draw

Model SL2HSC' Series:^	Current Ratings (Amps @ 24V) HIGH dB						
	Setting	15cd	30cd	75cd	110cd	150cd	177cd
	CONT T3 T3/T4	0.037	0.046	0.077	0.109	0.146	0.208

Model SL2HSC' Series:^	Current Ratings (Amps @ 24V) LOW dB						
	Setting	15cd	30cd	75cd	110cd	150cd	177cd
	CONT T3 T3/T4	0.030	0.039	0.070	0.102	0.139	0.201

Horn-Only | Output Current Draw

Model 'SL2HC' Series:^	Current Ratings (Amps) RMS Current @ 24VDC		
	Regulated Voltage Range	High	Low
	12VDC (8-17.5V)	0.025	0.020
	24VDC (16-33V)	0.028	0.021

Strobe-Only | Output Current Draw

Model SL2SC' Series:^	Current Ratings (Amps)					
	Regulated Voltage Range					
	16.0 – 33.0 VDC			16.0 – 33.0 VRMS		
	15cd	30cd	75cd	110cd	150cd	177cd
	0.022	0.030	0.060	0.086	0.125	0.185

Horn | Output Ratings (UL)

Model SL2HC'– and – SL2HSC' Series:^	UL Sound Output Ratings (dBA) Reverberant per UL464 @ 10 feet		
	Setting	SL2HC @ 12VDC	SL2HC & SL2HSC @ 24VDC
	CONT | T3| | T3/T4	High dBA	High dBA
		80	80
	CONT | T3| T3/T4	Low dBA	Low dBA
		78	78

Horn | Output Ratings (ULC)

Model SL2HC'– and – SL2HSC' Series:^	ULC Sound Output Ratings (dBA) Anechoic per ULCS525-16 @ 3.05 meters		
	Setting	SL2HC @ 12VDC	SL2HC & SL2HSC @ 24VDC
	CONT | T3| | T3/T4	High dBA	High dBA
		85	91
	CONT | T3| | T3/T4	Low dBA	Low dBA
		79	86

^ RMS current ratings are per UL maximum RMS method.
UL max current rating is the maximum RMS current within the listed voltage range (16 - 33V for 24V
^ For audible appliances, the max current is usually at the maximum listed voltage (16 - 33V for 24V units)
^ For unfiltered FWR ratings, see installation instructions

GENERAL NOTES:

1. Strobes are designed to flash at 1-flash-per-second minimum over their " Regulated Voltage Range."
2. NFPA-72 specifies a flash rate of 1-to-2 flashes-per-second.
3. All Candela ratings represent minimum effective Strobe intensity based on UL 1971.

Technical Data

General Properties

	MODEL `SL2'-series
OPERATING TEMPERATURE:	- 32°F (0°C) to 122°F (50°C) - for indoor use only
RELATIVE HUMIDITY:	93%, maximum
OPERATING VOLTAGE RANGES:	- 12 VDC / VFWR → 8.0 - 17.5 V - 24 VDC / VFWR → 16.0 – 33.0 V (12 VDC for Model SL2HC only)
STROBE OUTPUT RATING:	- UL 1638, 1971 | ULC-S526-16 - Field-selectable 15cd | 30cd | 75cd | 110cd | 150cd | 177cd Candela outputs
STROBE FLASH RATE:	Strobes are designed to flash at one-flash-per-second
STROBE SYNCRONIZATION:	- all Siemens Addressable Panels - Siemens PAD-series NAC extenders - Siemens Dual-Sync (DSC) modules, which provide the unique Siemens proprietary synchronization protocol
TEMPORAL PATTERN:	- Continuous - Code 3 (1/2 second on, 1/2 second off; then 1/2 second on, 1/2 second off; followed by 1/2 second on, 1-1/2 second off and repeat) NOTES: The Code 3 pattern is specified by ANSI and NFPA 72 for Standard Emergency Evacuation Signaling.

Physical Properties

	MODEL `SL2'-series
MATERIAL:	- White-or-red textured, ultraviolet (UV) stabilized, colored impregnated engineered plastic - Exceeds 94V-0 UL flammability rating
WEIGHT:	0.55 Lbs. (0.24 Kg.)
LENS TYPE:	LED strobe situated in a rugged Lexan lens
DIMENSIONS:	Horns: 6.27"(15.9 cm.) x 6.27"(15.9 cm.) x 1.32" (3.35 cm.) Horn-Strobes: 6.27"(15.9 cm.) x 6.27"(15.9 cm.) x 1.69" (4.29 cm.)

Mounting and Wiring Properties

	MODEL `SL2'-series
INDOOR MOUNTING:	- Ceiling-mount applications - Model SLSPBBC to any Single-Gang Backbox or to 4" (10.2 cm.) Square Box
WIRING TYPE:	#12 – #18, American Wire Gauge (AWG)

Details for Ordering

MODEL	PART NUMBER	APPLIANCE TYPE	MOUNTING TYPE	STROBE TYPE	FACEPLATE COLOR	FACEPLATE LETTERING
SL2HCR-N	S54329-F83-A1	Horn	CEILING	– None –	RED	– No Lettering –
SL2HCW-N	S54329-F84-A1		CEILING	– None –	WHITE	– No Lettering –
SL2HSCR-A	S54329-F87-A1	Horn-Strobe	CEILING	Clear	RED	AGENT
SL2HSCW-A	S54329-F92-A1		CEILING	Clear	WHITE	AGENT
SL2HSCR-AL	S54329-F88-A1	Horn-Strobe	CEILING	Clear	RED	ALERT
SL2HSCW-AL	S54329-F93-A1		CEILING	Clear	WHITE	ALERT
SL2HSCR-F	S54329-F89-A1	Horn-Strobe	CEILING	Clear	RED	FIRE
SL2HSCW-F	S54329-F94-A1		CEILING	Clear	WHITE	FIRE
SL2HSCR-N	S54329-F90-A1	Horn-Strobe	CEILING	Clear	RED	– No Lettering –
SL2HSCW-N	S54329-F95-A1		CEILING	Clear	WHITE	– No Lettering –
SL2HSCR-FB	S54329-F91-A1	Horn-Strobe	CEILING	Clear	RED	– Pictogram –
SL2HSCW-FB	S54329-F96-A1		CEILING	Clear	WHITE	– Pictogram –
SL2SCR-ALA	S54329-F182-A1	Strobe	CEILING	Amber	RED	ALERT
SL2SCW-ALA	S54329-F191-A1		CEILING	Amber	WHITE	ALERT
SL2SCR-NA	S54329-F183-A1	Strobe	CEILING	Amber	RED	– No Lettering –
SL2SCW-NA	S54329-F192-A1		CEILING	Amber	WHITE	– No Lettering –
SL2SCR-ALB	S54329-F184-A1	Strobe	CEILING	Blue	RED	ALERT
SL2SCW-ALB	S54329-F193-A1		CEILING	Blue	WHITE	ALERT
SL2SCR-NB	S54329-F185-A1	Strobe	CEILING	Blue	RED	– No Lettering –
SL2SCW-NB	S54329-F194-A1		CEILING	Blue	WHITE	– No Lettering –
SL2SCR-A	S54329-F186-A1	Strobe	CEILING	Clear	RED	AGENT
SL2SCW-A	S54329-F195-A1		CEILING	Clear	WHITE	AGENT
SL2SCR-AL	S54329-F187-A1	Strobe	CEILING	Clear	RED	ALERT
SL2SCW-AL	S54329-F196-A1		CEILING	Clear	WHITE	ALERT
SL2SCR-F	S54329-F188-A1	Strobe	CEILING	Clear	RED	FIRE
SL2SCW-F	S54329-F198-A1		CEILING	Clear	WHITE	FIRE
SL2SCR-N	S54329-F189-A1	Strobe	CEILING	Clear	RED	– No Lettering –
SL2SCW-N	S54329-F200-A1		CEILING	Clear	WHITE	– No Lettering –
SL2SCR-FB	S54329-F190-A1	Strobe	CEILING	Clear	RED	– Pictogram –
SL2SCW-FB	S54329-F201-A1		CEILING	Clear	WHITE	– Pictogram –
SL2SCW-EV	S54329-F197-A1	Strobe	CEILING	Clear	WHITE	Evacuation
SLSPBBCR	S54329-F55-A1	Backbox	CEILING	– None –	RED	– No Lettering –
SLSPBBCW	S54329-F55-A2		CEILING	– None –	WHITE	– No Lettering –

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice. The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product. All are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

SIEMENS

Siemens Industry, Inc.
Smart Infrastructure – Building Products
2 Gatehall Drive • Parsippany, NJ 07054
Tel: (973) 593-2600

October - 2023
(Rev. 2)

DTK-120SRD

Series Connected Surge Protective Device

DITEK's DTK-120SRD protects dedicated 120VAC power circuits that feed control panels and other critical equipment. The hybrid, series-wired design provides maximum critical load protection, and includes dry contacts for remote notification of surge protection status. EMI/RFI filtering ensures clean power for connected equipment.

Product Features

- Series-wired design for fast response and best level of protection
- Compact design fits a variety of control panels
- Multi-stage hybrid circuit design
- UL1283 EMI/RFI filtering
- Diagnostic LED provides positive indication of system power and SPD function
- Form C dry contacts for remote monitoring

Applications

- Fire Alarm Panels
- Control Panels
- 120VAC Single Phase Critical Loads
- UL Listed Control Panels where UL Recognized Components are Required

Accessories

- DIN Rail Mounting Kit, p/n DTK-DRK

Technical Specifications	
Voltage Configuration:	120VAC Single Φ (2W + G)
MCOV:	150V
Protection Modes:	L-N, L-G, N-G
Voltage Protection Rating:	600V L-G, L-N 1000V N-G
Surge Current Rating:	50,000A
Max Continuous Current:	20A
SCCR:	10,000A
Nominal Discharge Current Rating (I_n):	10kA
Operating Frequency:	50/60Hz
EMI/RFI Filtering Attenuation:	Up to 35dB, 100kHz – 100MHz

Mechanical Specifications	
Connection Method:	Hardwired studs, series-wired
Housing:	ABS
Operating Temperature:	-32°F – 104°F (0°C – 40°C)
Maximum Humidity:	95% non-condensing
Dimensions:	6.87" L x 3.5" W x 2.5" H (174.5 mm x 89 mm x 63.5 mm)
Weight:	12.16 oz (0.35 kg)

Quality Standards & Approvals	
Certifications:	UL1449 4th Edition, UL1283
SPD Type:	Type 2 Component Assembly
Warranty:	10 Year Limited Warranty

Every precaution has been taken to ensure that this literature is accurate and complete. DITEK Corporation assumes no responsibility and disclaims all liability for damages resulting from the use of this information or for any errors or omissions.

DTK-2LVLPF

Fire Alarm SLC Surge Protector

DITEK's DTK-2LVLPF is specifically designed to protect 24V Signaling Line Circuits (SLC) on fire alarm control panels where a current limiting feature is required. Its low-current fusing prevents induced surges from damaging sensitive control boards.

Product Features

- Series connection, parallel function adds no resistance to loop circuits
- Protects up to (2) SLC pairs

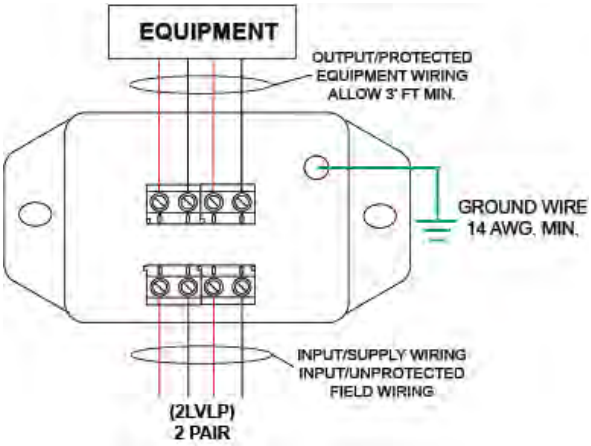
Applications

- Fire Alarm Panel SLC
- 4-20 mA Current Loops

Accessories

- DIN Rail Kit, p/n DTK-DRK

Wiring Example



Technical Specifications	
Service Voltage:	24V
MCOV:	38V
Clamping Voltage:	47V
Protection Modes:	Common Mode (L-G)
Surge Current Rating:	2,000A
Max. Continuous Current:	200mA

Mechanical Specifications	
Connection Method:	Hardwired terminals, 22-10 AWG
Housing:	ABS
Operating Temperature:	-40°F - 158°F (-40°C - 70°C)
Maximum Humidity:	95% non-condensing
Dimensions:	3.0" L x 1.6" W x 1.6" H (76 mm x 41 mm x 41 mm)
Weight:	2.65 oz (75 g)

Quality Standards & Approvals	
Certifications:	UL497B
Warranty:	10 Year Limited Warranty

Every precaution has been taken to ensure that this literature is accurate and complete. DITEK Corporation assumes no responsibility and disclaims all liability for damages resulting from the use of this information or for any errors or omissions.

ACEBOX
BY SPACE AGE ELECTRONICS

DBX

As Built Drawings Cabinets

Offer fire departments and other authorized personnel the convenience of having building layouts and alarm documents readily accessible with one of these durable cabinets available in a variety of sizes.

FAMILY OWNED MADE IN USA SINCE 1963

FEATURES

- 16 gauge steel construction
- Durable red powder coat
- White 1” indelible lettering “AS BUILT DRAWINGS” on included label
- Stainless steel piano hinge with CAT 30 keyed door lock
- Surface mount box
- Wall mounting holes for vertical or horizontal orientation
- Semi flush flange available for both A and D sizes

SPECIFICATIONS

The DBX As Built Drawings Cabinet shall be constructed of 16 gauge cold rolled steel and finished with a durable red powder coat. The front cover will include a durable label displaying “AS BUILT DRAWINGS” in 1” white indelible lettering, applied to the cover relative to the orientation of the installed back box. The front cover will feature a high security CAT 30 keyed door lock. Back box shall have universal surface mount design and wall mounting holes.

ORDERING INFORMATION

P/N#	Size	Width	Height	Depth
SSU00674	AA	12 1/4”	14 1/4”	4”
SSU00677	A	26 1/4”	14 1/4”	4”
SSU00678	D	26 1/4”	23 5/8”	4”

ACCESSORIES

P/N# SSU00680
A Size Semi-Flush Flange Kit

P/N# SSU00681
D Size Semi-Flush Flange Kit

www.1sae.com | toll free **1.800.486.1723** | fax **508.485.4740**
© Copyright 2018 Space Age Electronics, Inc. | This document subject to change without notice | LT10045 | Rev. G

POWER PS SONIC
TRUSTED BATTERY SOLUTIONS

PS SERIES

General Purpose | Emergency Lighting | Medical | Fire & Security

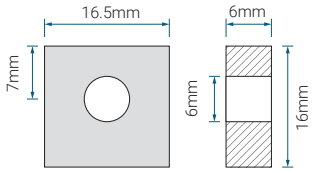
PS-12350

12V 35.0 AH @ 20-hr.
12V 33.0 AH @ 10-hr.

Rechargeable Sealed Lead Acid Battery
PS – General Purpose Series

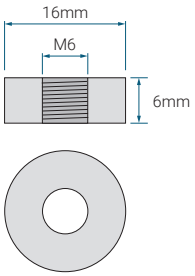
TERMINALS: (mm)

NB3: Heavy duty terminal posts with nut and bolt fasteners



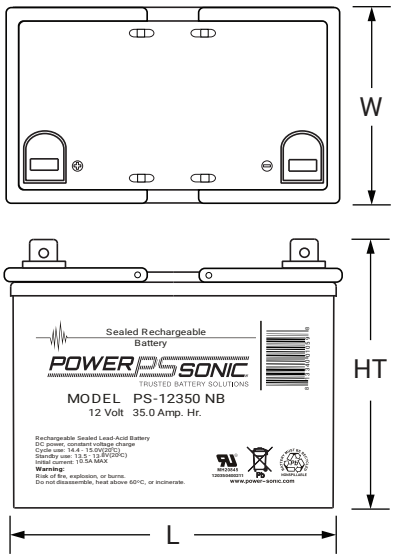
Torque: 3.9~5.4 Nxm

T6: Threaded insert with 6mm stud fastener



Torque: 3.9~5.4 Nxm

DIMENSIONS: inch (mm)



L: 7.68 (195)
W: 5.12 (130)
H: 6.46 (164)
HT: 7.01 (178)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

FEATURES

- Absorbent Glass Mat (AGM) technology for superior performance
- Valve regulated, maintenance free spill proof construction
- Power/volume ratio yielding excellent energy density
- Rugged vibration and impact resistant ABS case and cover
- Gas recombination technology
- 5 year design life

APPROVALS

- Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified
- U.L. recognized
- ISO9001:2015 – Quality management systems

PERFORMANCE SPECIFICATIONS

Nominal Voltage	12 volts (6 cells)
Nominal Capacity	
20-hr. (1.65A to 10.80 volts)	35.0 AH
10-hr. (3.07A to 10.80 volts)	33.0 AH
5-hr. (5.61A to 10.50 volts)	28.1 AH
1-hr. (20.7A to 9.60 volts)	20.7 AH
Approximate Weight	23.15 lbs. (10.5 kg)
Internal Resistance (approx.)	12.0 milliohms
Max Short-Duration Discharge Current (5 Sec.)	495.0 amperes
Shelf Life (% of nominal capacity at 68°F (20°C)	
1 Month	97%
3 Month	91%
6 Month	83%
Operating Temperature Range	
Charge	32°F (0°C) to 104°F (40°C)
Discharge	5°F (-15°C) to 122°F (50°C)
Case	ABS Plastic
Power Sonic Chargers	PSC-124000-PC PSC-124000A-C

GLOBAL HEADQUARTERS
(USA AND INTERNATIONAL EXCLUDING EMEA)
Power-Sonic Corporation
365 Cabela Dr Suite 300,
Reno, Nevada 89523
USA
T: +1 619 661 2020
E: customer-service@power-sonic.com

POWER-SONIC EMEA
(EMEA – EUROPE, MIDDLE EAST AND AFRICA)
Smitspol 4, 3861 RS Nijkerk,
The Netherlands
T NL: + 31 33 7410 700
T UK: + 44 1268 560 686
T FR: + 33 344 32 18 17
E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website.
© 2018. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners.
All data subject to change without notice. E&O.E

POWER PS SONIC
TRUSTED BATTERY SOLUTIONS

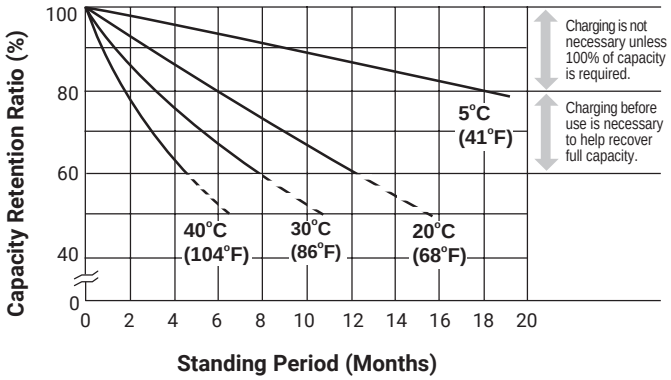
PS SERIES

PS-12350

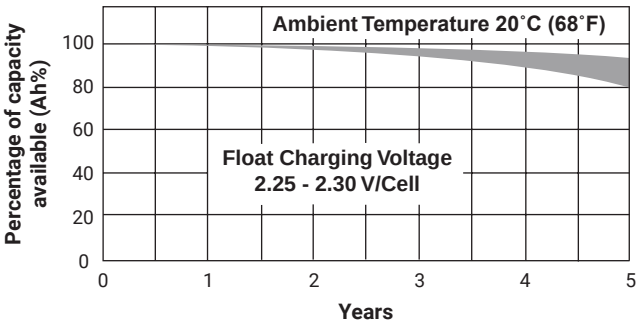
12V 33.0 AH @ 20-hr.
12V 30.7 AH @ 10-hr.

Rechargeable Sealed Lead Acid Battery
PS – General Purpose Series

SHELF LIFE & STORAGE



LIFE CHARACTERISTICS IN STAND-BY USE



CHARGING

Cycle Applications: Apply constant voltage charge at 2.35v/c – 2.45v/c (14.1 – 14.7v for 12v Monobloc) at 20°C. Initial charging current should be set at less than 0.25C Amps. Switch to float charge to avoid overcharging.

"Float" or "Stand-By" Service: Apply constant voltage charge of 2.25v/c – 2.30v/c (13.5 to 13.8 volts for 12v Monobloc at 20°C. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

Temperature Compensation: Charging Voltage for both Cyclic and Standby applications should be regulated in relation to ambient temperature. As temperature rises charging voltage should be reduced to prevent overcharge and increased as temperature falls to avoid undercharge.

For further charging information including temperature compensation factors, see Power Sonic Technical Manual/ Power Sonic Charger specifications.

APPLICATIONS

- General purpose
- Emergency lighting
- Medical
- Fire and security

CHARGERS

Power Sonic offers a wide range of chargers suitable for batteries with a variety of capacities.

Please refer to our website for more information on our switch mode and transformer type chargers.

Please contact our technical department for advice if you have difficulty in locating a suitable charger.

FURTHER INFORMATION

Please refer to our website **www.power-sonic.com** for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.

GLOBAL HEADQUARTERS
(USA AND INTERNATIONAL EXCLUDING EMEA)
Power-Sonic Corporation
365 Cabela Dr Suite 300,
Reno, Nevada 89523
USA
T: +1 619 661 2020
E: customer-service@power-sonic.com

POWER-SONIC EMEA
(EMEA – EUROPE, MIDDLE EAST AND AFRICA)
Smitspol 4, 3861 RS Nijkerk,
The Netherlands
T NL: + 31 33 7410 700
T UK: + 44 1268 560 686
T FR: + 33 344 32 18 17
E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website.
© 2018. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners.
All data subject to change without notice. E&O.E