



PRODUCT DATA SUBMITTAL

FIRE ALARM SYSTEM
PRODUCT DATA SUBMITTALS

PREPARED FOR:



PUCK LLC
141 JUNNY RD, ANGIER, NC, 27501-8625

Prepared By:
JOHNSON CONTROLS INTERNATIONAL
14200 E. EXPOSITION AVE., AURORA, COLORADO 80012



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TYC250FB

COMMERCIAL PARTITIONED FIRE AND BURGLARY ALARM CONTROL PANEL



The TYC250FB is a powerful member of the Honeywell family of commercial alarm panels, integrating burglary, CCTV and access control functions. The TYC250FB is designed to upgrade existing Focus 200P, Focus 200PA and Focus Cadet. Many features are available that extend the applications of the TYC250FB while simplifying end-user operation.

The TYC250FB control is suitable for fire applications, as well as for installations requiring integrated fire/burglary systems. It is the perfect solution for medical and professional

office buildings, churches and synagogues, banks, schools, strip malls, and factory or warehouse environments.

TYC250FB is compatible with a number of AlarmNet® communication products for alarm reporting and uploading/downloading.

FEATURES

- Eight hardwired zones standard, expandable to 250 using Tyco Focus Sims and Honeywell V-Plex® addressable points/zones
- Supports up to 250 wireless zones (fewer if using hardwired and/or V-Plex zones)
- Can control eight separate areas independently (8 partitions)
- Common lobby partition – auto arm or disarm based upon assigned partitions
- Master partition – used for viewing status of all partitions
- Stores up to 1000 events
- Accommodates 250 user codes and up to 500 access card holders using VISTAKEY®
- Supports V-Plex addressable VISTAKEY access control (1 to 15 doors)
- Two on-board NACS delivering a total of 2.3A @ 12V

- Automatic smoke detector sensitivity maintenance testing
- Four-wire smoke reset using on-board Form C relay
- Supports Dynamic Signaling for AlarmNet Communicators
- Supports Internet and GSM alarm reporting
- Supports graphical user interfaces for burglary use (e.g. 6280 and Tuxedo Touch™)
- Supports 6160TYC Custom Alpha keypad and 6160CR-2TYC Custom Alpha Red Fire keypad
- Upload/download via AlarmNet® Communicators
- Carbon monoxide (CO) zone support
- On-board serial port for communication with WIN-PAK®, Pro-Watch® and approved third-party applications

Additional Features

- Notification Appliance Circuits (two):
 - Programmable
 - Individually silenceable
- False alarm reduction features:
 - Exit error logic
 - Exit delay reset
 - Cross zoning
 - Call waiting defeat
 - Recent close report
- Supports commercial hardwired, addressable Tyco Focus Sims and Honeywell V-Plex polling loop and wireless zones
- Hardwired zones
 - Provides eight style B hardwired zones
 - EOLR supervised for UL burglary installations
 - Supports N.O. or N.C. sensors
 - Individually assignable to any of eight partitions (all fire zones on partition 1)
 - Up to 16 conventional two-wire smoke detectors each on zone one and two (32 total)

TYC250FB

COMMERCIAL PARTITIONED FIRE AND BURGLARY ALARM CONTROL PANEL

FEATURES (CONTINUED)

- Patented addressable V-Plex® polling loop technology
 - Class B, Style 3 SLC
 - Supports 242 two-wire addressable points
 - Global polling technology for faster processing
 - Supervised by panel
 - Zones individually assignable to partitions and notification circuit (bell) output or auxiliary relay
 - 4,000 ft. capability without the use of shielded cable
 - Extender/Isolation bus modules
 - Eight zone – Class A and B expander module
 - Eight zone – Class B expander module
- Single-zone supervised contact module
- Single relay module for auxiliary fire functions
- Supports anti-masking feature on “smart” motion detectors (e.g. DT7500SN)
- UL Listed wireless expansion
 - Supports up to 250 wireless zones/points
 - Supervised by control for check-in signals
 - Tamper protection for transmitters
 - Individually assignable to one of eight partitions
- Up to 15 doors using VISTAKEY® V-Plex Access Control
- Event reporting
- Local printer for event log printing
- Communication
 - Phone line, GSM and IP communicator support
 - Panel operation during download
 - Four or 10-digit subscriber account numbers
- Extra security feature that requires master code to allow installer into program mode (enabled through Compass Downloader)

SPECIFICATIONS

Electrical

- Primary power: 18VAC @ 72VA Honeywell No. 1451-UL9
- Control panel quiescent current draw: 300mA
- Backup battery:
 - 12VDC, 12AH min to 34.4AH max
 - Lead acid battery (gel type)
- Alarm power: 12VDC, 1.7A max for each notification (bell) circuit output Total 2.3A @ 12V
- Aux. standby pwr: 12VDC, 1A max
- Total power: 2.3A at 12VDC
- Standby time: 24 hours with 1A standby load using 34.4AH battery
- Fusing: Battery input, aux. and notification (bell) circuit outputs are protected using PTC circuit protectors. All outputs are power limited.
- Optional 24-volt kit

Communications

Dialer

- Line seize: Double Pole
- Ringer equiv: 0.7B

- Formats: ADEMCO Low Speed, ADEMCO 4+2 Express, ADEMCO High Speed, ADEMCO Contact ID, SESCOA and Radionics
- Dual phone line capability using 5140DLM module MSM Communicators
- GSM, i-GSM and IP Communicators

Environmental

- Storage temp: 14°F to 158°F (-10°C to 70°C)
- Operating temp: 32°F to 122°F (0°C to 50°C)
- Humidity: 85% RH
- EMI: Meets or exceeds the following requirements:
 - FCC Part 15, Class B Device
 - FCC Part 68
 - IEC EMC Directive

Agency Listings

- UL 864 – Control Units and Accessories for Fire Alarm Systems
- ULC-S559-04 – Equipment for Fire Signal Receiving Centers and Systems
- UL 1076 – Proprietary Burglar Alarm Units and Systems

- UL 1610 – Central Station Burglar Alarm Units
- CAN/ULC-S304-06 – Signal Receiving Centre and Premise Burglar Alarm Control Units
- UL 1635 – Digital Alarm Communicator System Units
- UL 365 – Police Station Connected Burglar Alarm Units and Systems
- UL 609 – Local Burglar Alarm Units and Systems
- UL 985 – Household Fire Warning System Units
- UL 1023 – Household Burglar Alarm System Units
- ULC-S545-02 – Residential Fire Warning System Control Units
- ULC/ORD-C1023-74 – Preliminary Standard for Household Burglar Alarm System Units
- ULC-S303-M91 – Standard for Local Burglar Alarm Units and Systems
- Factory Mutual (FM)
- California State Fire Marshal (CSFM)
- FDNY Certificate #6140

TYC250FB

COMMERCIAL PARTITIONED FIRE AND BURGLARY ALARM CONTROL PANEL

COMPATIBLE POLLING LOOP DEVICES

Model Number		Type
Honeywell	Tyco Focus (SIM)	
269SN		V-Plex® Holdup Switch
	270SN-SIM	Holdup Alarm Switch
	270SN-ADT	Holdup Alarm Switch
4101SN		Serial Number Single-Output Relay Module
4190SN		Serialized 2-Zone Expander
4191SN-WH		Serial Number Recessed Contact
4193SN		Serialized 2-Zone Expander
4193SNP		Serialized 1-Zone Expander
4208SN		8 Zone V-Plex Interface
4208SNF		8 Zone V-Plex Class A Interface
4208U		Universal 8-Zone Expander
4209U		Universal Group Zoning Module
4297		Extender Module
	450SIM-TIS	Passive Infrared Detector (PIR) – “Smart Contact” option in zone programming should be set to “YES”
	450SIM-ADT	Passive Infrared Detector (PIR) – “Smart Contact” option in zone programming should be set to “YES”
	472366	Sensor Interface Module – Input/Output (not supervised) device
	472367	Door Contact – White
	472371S	Overhead Door Contact
	472417	Door contact – Brown
	472425	Loop Interface Module – LIM
	472452	Embedded Door Contact
4939SN-WH/BR/GY		Serial Number Contact
4959SN		Aluminum Overhead Door Contact
5193SD		Photoelectric Smoke Detector Device
5193SDT		Photoelectric Smoke Detector with Heat Detector
	633 SIMA-TIS	Passive Infrared Detector (PIR) – “Smart Contact” option in zone programming should be set to “NO”
	633SIMA-ADT	Passive Infrared Detector (PIR) – “Smart Contact” option in zone programming should be set to “NO”
	669SIM-TIS	Dual Optic Technology Ceiling Mount PIR – “Smart Contact” option in zone programming should be set to “YES”
	669SIM-ADT	Dual Optic Technology Ceiling Mount PIR – “Smart Contact” option in zone programming should be set to “YES”
	ADT-BG-12L	Pull Station
	BG-12L	Pull Station
DT7500SN		V-Plex Dual Tech PIR
	DV1201A	Vault Vibration Sensor – VVS
	DV1201A-ADT	Vault Vibration Sensor – VVS
	FG1625SIM	Glass Break Detector
	FG1625SN-ADT	Glass Break Detector
IS2500SN		V-Plex/SIM Dual Tech
VPlEx-VSI		V-Plex Short Isolator

TYC250FB

COMMERCIAL PARTITIONED FIRE AND BURGLARY ALARM CONTROL PANEL

COMPATIBLE DEVICES

Auxiliary Devices

- 6160CR-2TYC – Red Fire Keypad
- 6160TYC – Burglary Keypad
- 6280, Tuxedo Touch with Wi-Fi® Graphic Keypads – Burglary
- 4204 – Relay Module, four Form C contacts
- 4204CF – Two supervised NAC circuits
- 5881ENHC Series RF receivers
- 6220S – System printer

Two-wire Conventional Smoke Detectors

- System Sensor
- ESL
- DSC

Horn/Strobes

- System Sensor
- Wheelock
- Gentex

Manual Pull Stations

- 5140MPS-1
- 5140MPS-2

V-Plex® (Addressable) Devices

- 4208U Universal Eight-zone Expansion Module
- 4208SN Eight-zone Expansion Module
- 4208EX Universal Eight-zone Expansion Module (Canada)
- 4101SN Single Relay/Zone Module

- 4208SNF Class A/B Expander Module
- 4190SN Remote Point Module – two zones
- 4193SN and 4193SNP Two-zone Expander Modules

V-Plex Extender/Isolation Modules

- 4297 Extender/Isolator Module
- VPLEX-VSI Short/Overload Isolation Module

V-Plex Passive Infrared Detectors

- IS2500SN
- DT7500SN

V-Plex (Addressable) Contacts

- 4939SN-WH
- 4959SN

V-Plex Glassbreak Detectors

- FG1625SN

Seismic Detectors

- SC100
- SC105

Commercial Wireless Devices

- 5817CBXT – Wireless Commercial Transmitter
- 5869 – Hold-Up Transmitter
- 5800CO/5800COA – Carbon Monoxide Detector
- 5800PIR-COM – Commercial PIR

Access Control

- VISTAKEY® V-Plex (addressable) Access Control
- VISTAKEY-SK Starter Kit
- VISTAKEY-EX Expansion Kit
- Integrates with WIN-PAK® and Pro-Watch® systems

Alarm Communications

U.S.

- GSMV4G – Digital Cellular Communicator with Two-way Voice Transport Capability
- iGSMV4G – Internet and Digital Cellular Communicator
- iGSMCFP4G – Commercial Fire Digital Cellular Communicator with Internet
- iGSMHS4G – High Security Internet and Digital Cellular Communicator
- 7845i-ENT – Internet/Intranet Enterprise Communicator
- 7847i – Internet Communicator

Canada

- GSMV4GCN – Digital Cellular Communicator with Two-way Voice Transport Capability
- iGSMVCN4G – Internet and Digital Cellular Communicator

Product specifications subject to change.

ORDERING

TYC250FBPK

Commercial Fire and Partitioned Burglary Alarm Control Panel (SATYC250FB & 6160CR-2TYC)

For more information:

www.honeywell.com/security

Automation and Control Solutions

Honeywell Security Products Americas

2 Corporate Center Dr. Suite 100

P.O. Box 9040

Melville, NY 11747

1.800.467.5875

www.honeywell.com



Honeywell

L/TSM250FBPD/D
February 2015
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6160CR

Commercial Fire Alpha Keypad



The 6160CR is an addressable remote keypad intended for use in commercial fire applications with ADEMCO's control platforms. The keys are continuously backlit for convenience and easy visibility. The LCD display is backlit only when a key is depressed*, or when the system is in alarm or trouble condition.

**Note: On some platforms, the LCD may be programmed to remain on at all times (see panel instructions for details).*

FEATURES

- Four programmable function keys
- Built-in sounder
- Four LED's
 - Armed
 - Ready
 - Trouble
 - Supervisory
- Large easy-to-read display
- Red removable door

SPECIFICATIONS

Physical:

- 5.250" W x 7.437" H x 1.312" D

Display:

- Alphanumeric, 32-character (2 lines x 16 characters) LCD back light
- LEDs: ARMED (red), READY

(green), *TROUBLE (yellow) and *SUPERVISORY (yellow)

- See control panel's instructions for specific applications regarding Trouble and Supervisory LEDs.

Sounder:

- High-quality speaker

Electrical:

- 45mA standby 150mA in alarm (sounder, back light and LED on)

Wiring table: (all keypads)

Compatibility

Supports Control Platforms:

- VISTA-32FB Rev. 3 and higher
- VISTA-128FB Rev. 4 and higher
- VISTA-128FBP
- VISTA-250FBP
- V128FBP-24
- V250FBP-24

DI	"Data IN" to control panel from keypad
-	Ground (-aux. Power)
+	+12VDC (+aux. Power)
DO	"Data OUT" from control panel to keypad

UL/CUL Listed for Residential and Commercial Fire and Burg installations. To be employed with manufacturer's listed control units as indicated in the installation instructions.

ORDERING

6160CR Commercial Fire Alpha Keypad

Honeywell Security Group

ADEMCO
165 Eileen Way, Syosset, NY 11791
www.ademco.com

ADEMCO
A Honeywell Company



4G LTE+IP

LTE and Internet Multi-Path Communicators

Honeywell Home is focused on providing the best alarm communication solutions for the security industry. Alternative communication methods are critical in the marketplace due to inconsistencies in VoIP, migration from POTS and the evolution of cellular networks. LTE network connectivity provides the longest viable cellular lifespan available.

All signals are delivered to the AlarmNet® Network Control Center, which routes the information to the appropriate central station. The state-of-the-art AlarmNet Network Control Center is fully redundant and monitored 24/7. AlarmNet has the ability to route messages using AlarmNet-i and 800 PLUS services, providing true redundancy and multi-path message delivery.

Honeywell Home End-to End Solutions



FEATURES

- **4G LTE network and IP compatibility**
- **Full Contact ID**
Contact ID reporting using ECP mode with compatible Honeywell Home control panels.
- **256-bit AES Encryption**
Advanced encryption standard used for secure communications.
- **Upload/Download**
Available with select Honeywell Home control panels. Requires Compass version 1.5.8.54a or higher.
- **Diagnostic LEDs**
Provide signal strength and status indications.
- **QOS**
Quality of Service diagnostics via AlarmNet supply vital information including when a message was received, battery voltage, input voltage, signal strength and message path.
- **AlarmNet360™ Online Management Platform**
Remote programming and diagnostics to improve business efficiencies and reduce truck rolls. www.alarmnet360.com
- **Remote Services Capability***
Optional Resideo Total Connect Remote Services — Boost RMR while providing on-the-go security and home control, video viewing, and real-time alerts, anytime, anywhere, on any PC or smart device.
- **FOTA Firmware Upgrading**
Complete over-the-air firmware upgrading capability. Provides remote service management ability.
- **Dual Technology Reporting**
Provides IP and cellular transmission paths with added flexibility and reliability. (LTE-IV, LTE-IA, LTE-IC)
- **Six Input Zones**
Used for universal control panel compatibility. (LTE-IV, LTE-IA, LTE-IC)
- **Built-in Power Supply/ Backup Battery**
On-board charging circuit design accommodates back-up battery. Includes primary power and battery supervision. 6V 3.1Ah battery supplied to deliver up to 24 hours of standby operation.

*Service subscription required.

SPECIFICATIONS

VISTA 4G LTE Multi-Path Communicators (LTE-IV/LTE-IA/ LTE-IC)



DESCRIPTION	<ul style="list-style-type: none"> • Multi-path IP and Cellular Technologies • Integrated VISTA ECP design • LTE CAT1
PANEL COMPATIBILITY	All VISTA® controls with ECP radio support. Universal panel compatible using zone inputs.
DIMENSIONS	8.4" x 8.0" x 1.5" (21.3cm x 20.3cm x 3.8cm)
ELECTRICAL	<ul style="list-style-type: none"> • Input Power: 16.5V AC, 40VA transformer, Model No. 1361 • Backup Battery: 6V, 3.1AH
RF	Antenna: Internal Penta-Band antenna with receive diversity for LTE CAT1. Average 3.8dBi gain.
ENVIRONMENTAL	Operating Temperature: -4° to 131° F (-20° to 55° C) Storage Temperature: -40° to 158° F (-40° to 70° C)
AGENCY LISTINGS	ETL Listed

VISTA 4G LTE Multi-Path Communicators (LTE-CFA/LTE-CFV)



DESCRIPTION	Commercial Fire Internet and LTE Communicator		
PANEL COMPATIBILITY	VISTA-32FB, VISTA-32FBT, VISTA-128FBP, VISTA-128FBPT, VISTA-250FBP, VISTA-250BPT.		
DIMENSIONS	15.0"H X 12.75"W x 3.0" D		
ELECTRICAL	12VDC supplied by the control panel 90mA Standby, 105Ma active		
RF	Frequency	Peak Gain (dBi)	Radiation
	698 to 960 MHz	0.84 to 1.09	Omni-directional
	1710 to 2170 MHz	1.81 to 1.87	Omni-directional
ENVIRONMENTAL	Operating Temperature: 0°C to 49°C Storage Temperature: -40° to 158° F -40° C to 70° C		
AGENCY LISTINGS	UL864 10 th Edition, CSFM		

SPECIFICATIONS

VISTA 4G LTE Multi-Path Communicators (LTE-HSV)



DESCRIPTION	High Security Internet and Cellular Communicator
PANEL COMPATIBILITY	VISTA® Control panels with ECP radio support. Universal panel compatible using zone inputs
DIMENSIONS	8.4" x 8.0" x 1.5" (21.3cm x 20.3cm x 3.8cm)
ELECTRICAL	<ul style="list-style-type: none"> • Input Power: 16.5V AC, 40VA transformer, • Backup Battery: 319mA Standby, 380Ma active
RF	Antenna: Internal Penta-Band antenna with receive diversity for LTE CAT1 Average 3.8dBi gain.
ENVIRONMENTAL	Operating Temperature: -4° to 131° F (-20° to 55° C) Storage Temperature: -40° to 158° F (-40° to 70° C)
AGENCY LISTINGS	UL365, UL1610, Encrypted Line Security, NIST

ORDERING

U.S.

LTE SKU	Carrier	Panel Compatibility	Replaced 3G/4G CDMA Radio
LTE-IA	AT&T	VISTA-15P VISTA-20P VISTA-128BPT VISTA-250BPT (universal panel compatibility using zone inputs)	IGSMV4G
LTE-IV	Verizon	VISTA-15P VISTA-20P VISTA-128BPT VISTA-250BPT	GSMX4G/CDMA-X
LTE-CFA/ LTE-CFV	AT&T/ Verizon	VISTA-32FB VISTA-32FBT VISTA-128FBP VISTA-128FBPT VISTA-250FBP VISTA-250BPT	IGSMCFP4G
LTE-HSV	Verizon	VISTA-15P VISTA-20P VISTA-128BPT VISTA-250BPT (universal panel compatibility using zone inputs)	IGSMHS4G

Canada

LTE SKU	Carrier	Panel Compatibility	Replaced 3G/4G Radio
LTE-IC	Bell	VISTA-15PCN VISTA-20PCN VISTA-128BPTCN VISTA-250BPTCN (universal panel compatibility using zone inputs)	IGSMV4G

For more information

security.honeywellhome.com



resideo

Resideo Technologies, Inc.

2 Corporate Center Drive, Suite 100

P.O. Box 9040

Melville, NY 11747

1-800-645-7492

resideo.com

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Honeywell Home



DTK-DRF Series Low Voltage DIN Rail Surge Protectors

DITEK's DTK-DRF Series of low voltage DIN Rail surge protectors provide robust protection in a compact package. This series offers high-performance surge protection for critical low voltage applications within industrial and commercial environments. Removable protection module for easy serviceability.



DTK-DR5F

Product Features

- Protects (2) circuit pairs
- Field-replaceable protection module
- Hybrid design utilizing SAD and GDT technologies
- Opens circuit when compromised
- Connection to ground via grounded DIN rail or the included grounding lug
- 35mm DIN Rail mounting configuration
- Suitable for use on both AC and DC circuits

Technical Specifications

	DTK-DR	5F	12F	24F	36F	48F	75F	130F
Service Voltage:		5V	12V	24V	36V	48V	75V	130V
MCOV:		6V	18V	33V	48V	64V	90V	140V
Clamping Voltage:		8V	21.6V	39V	57V	76V	108V	155V
Protection Modes:		Differential Mode (L-L) Common Mode (L-G)						
Surge Current Rating:		20,000A						
Maximum Continuous Current:		1 Amp						
Failure Mode:		Open Circuit						

Applications

- Industrial Control Panels
- UL508 Panel Manufacturing
- 4-20mA Current Loops
- Low Voltage Power Circuits
- RS485 Data Circuits
- 70V Audio Circuits

Mechanical Specifications

Connection Method:	Hardwired terminals: 30 – 12 AWG
Mounting Method:	35mm DIN Rail
Housing:	ABS Plastic, UL94-V0, IP20
Operating Temperature:	-40°F - 158°F (-40°C - 70°C)
Maximum Humidity:	95% non-condensing
Dimensions:	4.01" L x 0.48" W x 2.93" H (101.9 mm x 12.2 mm x 74.3 mm)
Weight:	2.3 oz (65 g)

Accessories

- Replacement Module – Add “M” suffix

Quality Standards & Approvals

Certifications:	UL497B
Warranty:	10 Year Limited Warranty





5193 Series

V-Plex® Addressable Smoke Detector

The Honeywell Home V-Plex Addressable Photoelectric Smoke Detectors are designed to provide open area protection and to be used with compatible UL Honeywell Home control panels that support V-Plex technology. The detectors incorporate a state-of-the-art optical sensing chamber and an advanced microprocessor. Built-in Drift Compensation algorithms automatically maintain proper operation at factory calibrated detection levels, even when sensitivity is altered due to the presence of contaminants settling into the unit's chamber. The 5193SDT also features a restorable, built-in, fixed temperature (135°F/57.2°C) thermal detector.



FEATURES AND BENEFITS

- **Easy Installation:** Installation is simplified by the use of a mounting base that may be pre-wired to the system, allowing the detector to be easily installed or removed for maintenance or service. (See Figure 1).
- **LED Status Indicators:** Two LEDs (green and red) provide local visual indication of the detector's status – including normal operation, alarm, out of sensitivity and trouble conditions.
- **Test button:** This button allows the user to perform periodic testing of the detector's circuitry and verify that the detector is within the sensitivity limits.
- **Versatile Mounting:** Mounting is made simple with the included hardware and the large mounting ports, which accommodate drywall anchors for easy surface mounting. (See Figure 1).
- **Tamper Protection and Tamper Resistance:** The detector contains a built-in tamper switch that can communicate back to the control panel in the event the detector is removed from its base. For an added level of security, the detector also includes a tamper resistant element that prevents removal from the base without the use of tools. (See Figure 1).

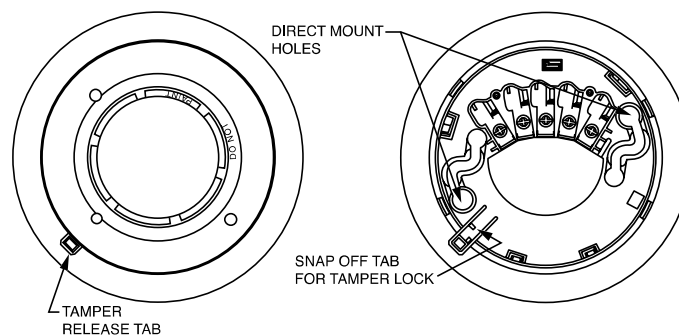


Figure 1: Tamper-Resistant Feature/Wiring

5193 Series Technical Specifications

Heat Sensor: (Model 5193SDT): 135°F (57.2°C); Fixed Temperature Electronic Thermistors	Diameter (including base): 5.3 inches (13.46 cm)
Operating Ambient Temperature Range: 32° to 100°F (0° to 38°C)	Height (including base): 2.0 inches (5.08 cm)
Operating Humidity Range: 0 to 95% RH non-condensing	Weight: 6.3 oz. (178.6 g)
Storage Temperature Range: -4° to 158°F (-20° to 70°C)	Agency Listing: UL 268
	System Voltage Range: 7-14V
	Standby Current (maximum @ 12V) LED off: 1.2mA LED on: 2.8mA

ACCESSORY (sold separately)

To measure the detector’s sensitivity, the SENS-RDR Infrared Sensitivity Reader tool (sold separately) should be used. It reduces testing time, simplifies sensitivity measurements and displays them precisely in terms of percent per foot obscuration. The SENS-RDR eliminates the need for magnets, voltmeters and ladders.

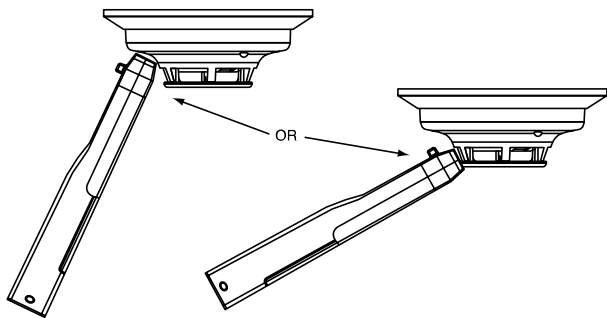


Figure 2: Position of Reader



ORDERING

5193SD	Addressable Photoelectric Smoke Detector
5193SD	Addressable Photoelectric Smoke Detector with Integral Heat Sensor
Accessory sold separately:	
SENS-RDR	Handheld Sensitivity Reader

For more information
security.honeywellhome.com/hsc



Resideo Technologies, Inc.
2 Corporate Center Drive, Suite 100
P.O. Box 9040
Melville, NY 11747
1-800-645-7492
resideo.com

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5600 Series Mechanical Heat Detectors

System Sensor's 5600 series mechanical heat detectors offer a low-cost means for property protection against fire, and for non-life-safety installations where smoke detectors are inappropriate.

Features

- Multiple configurations for installations:
 - Single- and dual-circuit models
 - Fixed temp and combination fixed- temp/rate-of-rise 135°F or 194°F ratings.
- Plain housing for residential installations (Model 5601P)
- Easy-to-use terminal screws
- A broad range of back box mounting options:
 - Single gang
 - 3.5" and 4" Octagonal
 - 4" square with square to round plaster ring
- Reversible mounting bracket



Multiple configurations. The 5600 series offers a full-line of configurations to accommodate a broad range of applications. Both single- and dual-circuit models are available for low- and high-temperature ratings with either fixed temperature or combination fixed temperature/rate-of-rise (ROR) activation. The ROR element of the fixed/ROR models is restorable to accommodate field-testing.

Installation flexibility. To satisfy a variety of installation needs, the 5600 series easily mounts to single-gang and octagonal back boxes. And these models accommodate four-square back boxes, when used with a square to round plaster ring. The reversible mounting bracket permits both flush- and surface-mount back box installations.

Visual identification. The 5600 series provides clear markings on the exterior of the unit to ensure that the proper detector is being used. Alphanumeric characters identify the activation method, as well as the temperature rating, in Fahrenheit and Celsius degrees. Fixed temperature models are identified FX, while combination fixed/rate-of-rise units are marked FX/ROR. The 5600 series also provides a post-activation indicator in the form of a collector. When the detector is activated, the collector drops from the unit, making it easy to identify the unit in alarm.

Agency Listings



Specifications

Architectural/Engineering Specifications

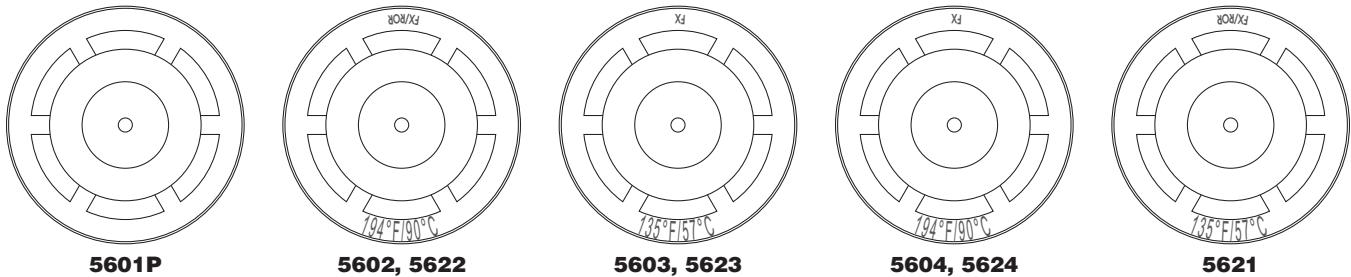
Mechanical heat detector shall be a System Sensor 5600 series model number _____, listed to Underwriters Laboratories UL 521 for Heat Detectors for Fire Protective Signaling Systems. The detector shall be either a single-circuit or a dual-circuit type, normally open. The detector shall be rated for activation at either 135°F (57°C) or 194°F (90°C), and shall activate by means of a fixed temperature thermal sensor, or a combination fixed temperature/rate-of-rise thermal sensor. The rate-of-rise element shall be activated by a rapid rise in temperature, approximately 15°F (8.3°C) per minute. The detector shall include a reversible mounting bracket for mounting to 3½-inch and 4-inch octagonal, single gang, and 4-inch square back boxes with a square to round plaster ring. Wiring connections shall be made by means of SEMS screws that shall accommodate 14–22AWG wire. The detector shall contain alphanumeric markings on the exterior of the housing to identify its temperature rating and activation method. The rate-of-rise element of combination fixed temperature/rate-of-rise models shall be restorable, to allow for field-testing. The detectors shall include an external collector that shall drop upon activation to identify the unit in alarm.

Physical/Operating Specifications

Maximum Installation Temperature	5601P, 5603, 5621, and 5623: 100°F (38°C) 5602, 5604, 5622, and 5624: 150°F (65.6°C)
Operating Humidity Range	5 to 95% RH non-condensing
Dimensions with mounting bracket	Diameter: 4.57 inches (11.6cm) Height: 1.69 inches (4.3cm)
Alarm Temperature	5601P, 5603, 5621, and 5623: 135°F (57°C) 5602, 5604, 5622, and 5624: 194°F (90°C)
Weight	6 oz. (170 grams)
Rate-of-Rise Threshold	15°F (8.3°C) rise per minute (models 5601P, 5602, 5621, and 5622 only)
Mounting	3½-inch octagonal back box 4-inch octagonal back box Single gang back box 4-inch square back box with a square to round plaster ring

Electrical Specifications

Operating Voltage / Contact Ratings	6–125VAC / 3A 6–28VDC / 1A 125VDC / 0.3A 250VDC / 0.1A
Input Terminals	14–22 AWG



Ordering Information

Model	Circuit	Identification Method on Exterior	Temperature Rating	Activation	UL Protected Spacing – 10 Foot Ceiling*
5601P	Single	None	135°F (57°C)	Fixed Temperature / Rate-of-Rise	50 feet × 50 feet (15.24m × 15.2m)
5602	Single	Lettering	194°F (90°C)	Fixed Temperature / Rate-of-Rise	50 feet × 50 feet (15.24m × 15.2m)
5603	Single	Lettering	135°F (57°C)	Fixed Temperature	25 feet × 25 feet (7.62m × 7.62m)
5604	Single	Lettering	194°F (90°C)	Fixed Temperature	25 feet × 25 feet (7.62m × 7.62m)
5621	Dual	Lettering	135°F (57°C)	Fixed Temperature / Rate-of-Rise	50 feet × 50 feet (15.24m × 15.2m)
5622	Dual	Lettering	194°F (90°C)	Fixed Temperature / Rate-of-Rise	50 feet × 50 feet (15.24m × 15.2m)
5623	Dual	Lettering	135°F (57°C)	Fixed Temperature	25 feet × 25 feet (7.62m × 7.62m)
5624	Dual	Lettering	194°F (90°C)	Fixed Temperature	25 feet × 25 feet (7.62m × 7.62m)

*NOTE: Refer to NFPA72 guidelines for spacing reductions when ceiling heights exceed 10 feet.



3825 Ohio Avenue • St. Charles, IL 60174
Phone: 800-SENSOR2 • Fax: 630-377-6495
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for current product information, including the latest version of this data sheet.
SPDS30001 • 7/13

TIS-BG12L

Non-Coded Conventional Manual Fire Alarm Pull Station



Conventional Initiating Devices

General

The **TIS-BG12L** is a cost-effective, feature-packed, non-coded manual fire alarm pull station. The TIS-BG12L provides Unimode Fire Alarm Control Panels (FACPs), as well as other manufacturers' controls, with a manual alarm initiating input signal. Its innovative design, durable construction, and multiple mounting options make the TIS-BG12L simple to install, maintain, and operate.

Features

- Dual action.
- Aesthetically pleasing, highly visible design and color.
- Attractive contoured shape and light textured finish.
- Meets ADA 5 lb. maximum pull-force.
- Meets UL 38, Standard for Manually Actuated Signaling Boxes.
- Easily operated (single- or dual-action, model dependent), yet designed to prevent false alarms when bumped, shaken, or jarred.
- PUSH IN/PULL DOWN handle latches in the down position to clearly indicate the station has been operated.
- The word "ACTIVATED" appears on top of the handle in bright yellow, further indicating operation of the station.
- Operation handle features white arrows showing basic operation direction for non-English-speaking persons.
- Braille text included on finger-hold area of operation handle and across top of handle.
- Multiple hex- and key-lock models available.
- U.S. patented hex-lock needs only a quarter-turn to lock/unlock.
- Station can be opened for inspection and maintenance without initiating an alarm.
- Product ID label viewable by simply opening the cover; label is made of a durable long-life material.
- The words "NORMAL" and "ACTIVATED" are molded into the plastic adjacent to the alarm switch (located inside).
- Four-position terminal strip molded into backplate.
- Terminal strip includes Phillips combination-head captive 8/32 screws for easy connection to Initiating Device Circuit (IDC).
- Terminal screws backed-out at factory and shipped ready to accept field wiring (up to 12 AWG/3.1 mm²).
- Terminal numbers are molded into the backplate, eliminating the need for labels.
- Switch contacts are normally open.
- Can be surface-mounted (with **SB-10** or **SB-I/O**) or semi-flush mounted. Semi-flush mount to a standard single-gang, double-gang, or 4" (10.16 cm) square electrical box.
- Backplate is large enough to overlap a single-gang backbox cutout by 1/2" (1.27 cm).
- Optional trim ring (**BG12TR**).
- Models packaged in attractive, clear plastic (PVC), clam-shell-style, Point-of-Purchase packages. Packaging includes a cutaway dust/paint cover in shape of pull station.

Construction

- Cover, backplate and operation handle are all molded of durable polycarbonate material.
- Cover features white lettering and trim.
- Red color matches System Sensor's popular SpectraAlert® Advance horn/strobe series.



Operation

The TIS-BG12L manual pull station provides a textured finger-hold area that includes Braille text. In addition to PUSH IN and PULL DOWN text, there are arrows indicating how to operate the station, provided for non-English-speaking people.

Pushing in and then pulling down on the handle activates the normally-open alarm switch. Once latched in the down position, the word "ACTIVATED" appears at the top in bright yellow, with a portion of the handle protruding at the bottom as a visible flag. Resetting the station is simple: insert the key, twist one quarter-turn, then open the station's front cover, causing the spring-loaded operation handle to return to its original position. The alarm switch can then be reset to its normal (non-alarm) position manually (by hand) or by closing the station's front cover, which automatically resets the switch.

Specifications

PHYSICAL SPECIFICATIONS:

ELECTRICAL SPECIFICATIONS:

Switch contact ratings: gold-plated; rating 0.25 A @ 30 VAC or VDC.

ENGINEERING/ARCHITECTURAL SPECIFICATIONS

Manual Fire Alarm Stations shall be non-code, with a key-operated reset lock in order that they may be tested, and so designed that after actual Emergency Operation, they cannot be restored to normal except by use of a key. An operated station shall automatically condition itself so as to be visually detected as activated. Manual stations shall be constructed of red colored LEXAN (or polycarbonate equivalent) with clearly visible operating instructions provided on the cover. The word **FIRE** shall appear on the front of the stations in white letters, 1.00 inches

(2.54 cm) or larger. Stations shall be suitable for surface mounting on matching backbox SB-10 or SB-I/O; or semi-flush mounting on a standard single-gang, double-gang, or 4" (10.16 cm) square electrical box, and shall be installed within the limits defined by the Americans with Disabilities Act (ADA) or per national/local requirements. Manual Stations shall be Underwriters Laboratories listed.

Agency Listings and Approvals

The listings and approvals below apply to the TIS-BG12L pull station. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL** Listed: file S285.
- **CSFM** approved: file 7150-0085:194.
- **FM** approved.
- **MEA** approved: file 67-02-E.
- **Patented:** U.S. Patent No. D428,351; 6,380,846; 6,314,772; 6,632,108.

Product Line Information

➔ **TIS-BG12L:** Dual-action pull station with SPST N/O switch.

BG-12LOB: Dual-action pull station with key lock, outdoor applications listings (**BG-12LO**), and backbox. Includes

SB-I/O indoor/outdoor backbox, and sealing gasket. Model will also mount to **WP-10** weatherproof backbox in retrofit applications.

NOTE: BG-12LO not available separately;

BG-12LO + approved backbox = BG-12LOB.

Outdoor applications listings apply to BG-12LOB combination.

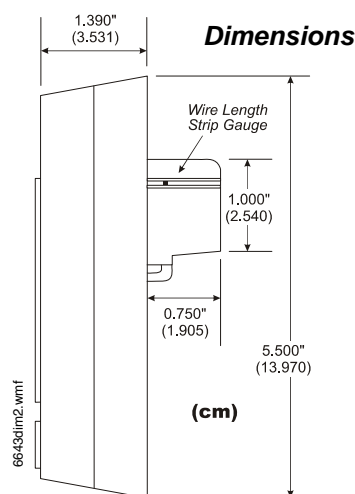
SB-10: Surface-mount backbox, metal.

SB-I/O: Surface-mount backbox, plastic. (Included with BG-12LOB.)

BG12TR: Optional trim ring for semi-flush mounting.

WP-10: Outdoor use backbox.

17003: Keys, set of two. (Included with key-lock pull stations.)

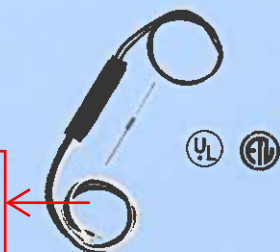


2012 Tyco Integrated Security

This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

For more information, contact Tyco. Phone:(561)988-3600 www.unimode.com

4193SN

**Description:**

Addressable two-zone expander for Honeywell V-Plex addressable systems

Product advantages:

- Can be located anywhere along the two-wire addressable V-Plex bus
- Converts any conventional detection device to an addressable device. Conventional detector must provide dry-contact output.
- System automatically learns device serial number so no DIP switch addressing is required
- Small size fits easily into most sensing detector enclosures or splice boxes
- Two zone inputs: one supervised with 10K EOL resistor, one unsupervised loop
- Loop 1 provides a broad, 300 ohm tolerance
- Supervised for open, shorted or normal circuit conditions
- UL Listed for commercial burglary and fire alarm applications

Recommended use:

Use for commercial addressable systems when deploying conventional detectors in a V-Plex addressable system

Mounting options:

- Fits well inside the detector's enclosure or in an adjoining electrical splice box
- Mount within three feet of detector for UL Listed applications
- Locate anywhere along the V-Plex bus

Compatibility:

- All VISTA control panels that are compatible with V-Plex addressable technology such as VISTA-32FB, VISTA-128BP, VISTA-128FBP, VISTA-250BP and VISTA-250FBP
- Not compatible with VISTA-20P control panels

Product dimensions:

0.625" W x 2.5" L

Included items:

10K end of line resistor for loop 1

Power:

Supplied by the control panel's two-wire V-Plex Bus: 1.5mA at 7-11VDC

Temperature:

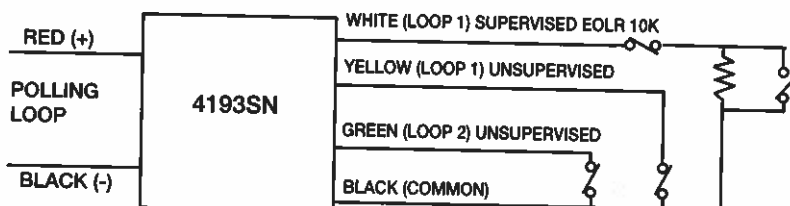
20° F to 105° F (-7° C to 40.5° C)

Humidity:

5-95% relative, non-condensing

Listings:

- UL Listed to UL365, UL464, UL609, UL864, UL1610, UL1635, CAN/ULC-S303, CAN/ULC-S304, CAN/ULC-S525, CAN/ULC-S527
- ETL Listed to UL864
- CSFM Certificate Number: 7300-1645-127





resideo

V-Plex[®]
The wiring solution
that saves time
and money
Addressable Technology



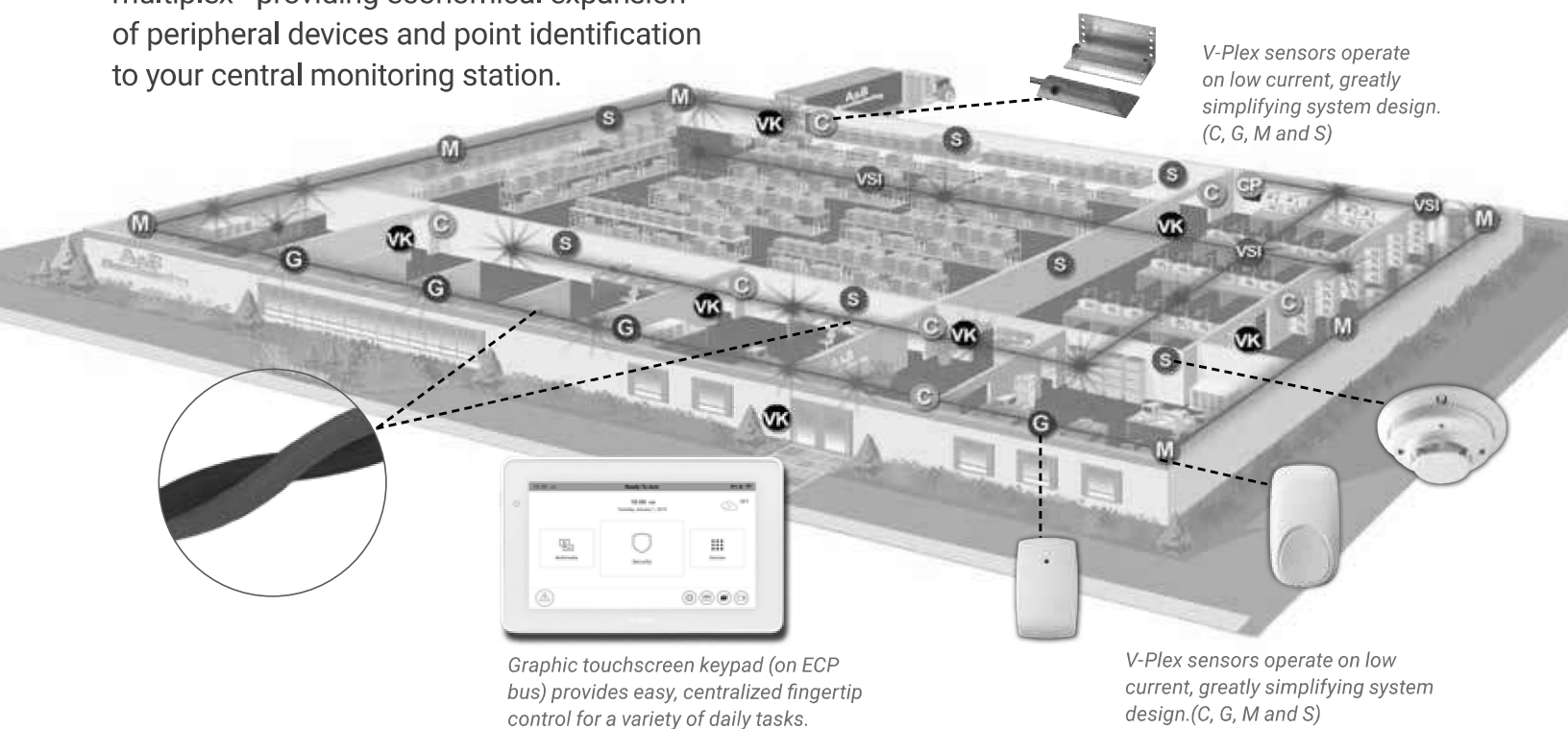
The V-Plex® Advantage

The Industry's Leading Addressable Technology

V-Plex is the polling loop technology that literally defines price and performance on a simple pair of wires.

By using two wires instead of four, V-Plex offers significant advantages over “home run” wiring or the conventional four-wire multiplex—providing economical expansion of peripheral devices and point identification to your central monitoring station.

- G** Glassbreak Detector
- M** Motion Detector
- GP** Control Panel
- VK** VISTAKEY®
- VSI** VSI V-Plex Short Loop Isolator
- C** Contact
- S** Smoke Detector



Benefits

Reduced Costs

Since each V-Plex sensor can be installed using two wires for power and data—including existing wiring in many cases—costs are substantially reduced.

Reduced Power Consumption

V-Plex devices draw minimal amounts of current, minimizing the need for auxiliary power supplies.

Fast, Accurate Identification and Response

Point ID allows you to quickly and easily pinpoint the source of alarm or trouble from the keypad and communicate the information to the proper authorities—and lets you bypass protection at any specific point.

Reduced Time and Labor

V-Plex offers a labor and time-saving maintenance feature that gives you the ability to diagnose and pinpoint defects. As a result, installation and service professionals can arrive at the

site already knowing the exact location of the problem. Service calls become much more efficient, saving you the time and labor costs associated with repeat visits.

Reduced Maintenance Costs

V-Plex devices continually monitor functions displayed at the keypad. All issues are stored in the local event log and reported to a monitoring station. This drastically reduces system maintenance costs when annual tests or inspections are performed.

V-Plex products do not require batteries. This eliminates truck rolls for replacements.

The Resideo V-Plex addressable technology offers many new and exciting innovations while fully supporting existing addressable loop products. Efficiencies in installation and reliability add up quickly to improve your bottom line. Begin experiencing the V-Plex advantage today!

ACCESSORIES



- DT8050A-SN**
V-Plex® Dual Tec®
Motion Sensor with
Anti-Mask
- Dual motion sensor (PIR/microwave)
 - 50' (15m) mirror optic
 - Anti-mask feature notifies user if sensor is masked



- IS3050A-SN**
V-Plex Passive
Infrared Motion
Sensor with Anti-Mask
- PIR motion sensor
 - 50' (15m) mirror optic
 - Anti-mask feature notifies user if sensor is masked



- 5193SD/5193SDT**
V-Plex Photoelectric
Smoke Detector
- 5193SDT features (135°F/57°C) heat detector
 - Easy installation and no tools necessary for cleaning



- FG1625SN**
V-Plex FlexGuard®
Glassbreak Detector
- FlexCore™ Signal Processor
 - Selectable sensitivity
 - Easy installation with FG-701 Tester
 - No minimum range
 - 25' (9.6m) max range



- 4191SN-WH**
V-Plex Recessed
Contact
- 1/2" (12.7mm) diameter case
 - Standard gap: 7/8" (22mm)
 - Steel door adapter available (4191WA)



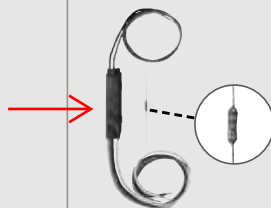
- 4939SN**
V-Plex Addressable
Surface Mount
Contact
- Snap on cover to conceal mounting screws
 - Standard gap: 1.25" (32mm)
 - 5' (1.5m) CL II jacketed cable
 - Available in white, brown and gray



- 4959SN**
V-Plex Addressable
Overhead Door
Contact
- Rugged aluminum housing and adjustable L bracket type magnet
 - Standard gap: 2" (51mm)



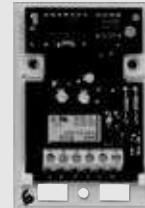
- 269SN**
V-Plex Holdup Switch
- Fully supervised
 - Reset key for testing and reset of alarm
 - Stainless steel protective cover



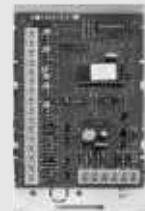
- 4193SN/4193SNP**
V-Plex Two-Zone
Expander
- Makes any hardwired device V-Plex ready
 - Built-in serial number for addressing
 - One supervised, one unsupervised zone



- 4190SN**
V-Plex Two-Zone
Expander Module
- Left Zone-EOLR supervised, open or closed circuit sensors
 - Right Zone-unsupervised, closed circuit sensors



- 4101SN**
V-Plex Single Output
Relay Module
- Form C contacts rated at 2A, 28V AC or DC with supervision
 - One Class B EOLR supervised auxiliary input zone



- 4208SNF**
V-Plex Universal Class
A & Class B Expander
Module
- Provides up to six Class B supervised zones and converts two panel zones to Class A supervised zones
 - Powered from addressable loop or DC power supply
 - Addressing via DIP switch

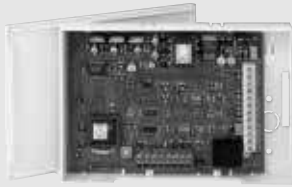


- 4208SN**
V-Plex Eight-Zone
Expander Module
- Dip-switch and serial number polling
 - Supports up to 8 Class B zones



- 4209U**
V-Plex Group Zoning
Module
- 4-Zone, 2-Wire Smoke Detector Interface
 - Streamlines large or expanded system installation

VISTAKEY **V-Plex® Single Door Access Control Module**



Now, you can add access control to VISTA® light commercial security systems. VistaKey maximizes security investments by integrating access control, intrusion and fire detection into a single system. You can offer your customers 1 to 15 doors of seamless integration, and a unique combination of security and access control features:

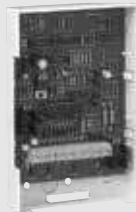
- Arms and disarms security system with access card
- Connects conveniently to the V-Plex polling loop
- Tracks employee door entry and locks/unlocks doors on schedule
- Restricts access based on job function, time or location
- Records events to the VISTA event log; printer optional

VPLEX-VSI **V-Plex Short Isolator**



- Detects and isolates polling loop branches with complete or resistive shorts, and overload or defective polling loop devices on initial power up
- Can be used to isolate burglary devices from fire devices, increasing life safety and protection
- LED indicator reduces troubleshooting time and maintenance costs
- Powered directly from the V-Plex two-wire polling loop
- Can be placed on any major or minor branch in any configuration on the polling loop

4297 **V-Plex Polling Loop Driver and Isolator**



- Adds additional polling loop current drive power for large installations
- Provides UL driven requirement to isolate burglary products from fire products
- Power via the control panel auxiliary 12V output

For more information

resideo.com/pro



For more information
resideo.com

Resideo Technologies, Inc.
2 Corporate Center Drive,
Suite 100
P.O. Box 9040
Melville, NY 11747
1-800-645-7492

L/VPLEXBR/D | AF | 05/22
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