# Tesla Photovoltaic Module

## T395H, T400H, and T405H

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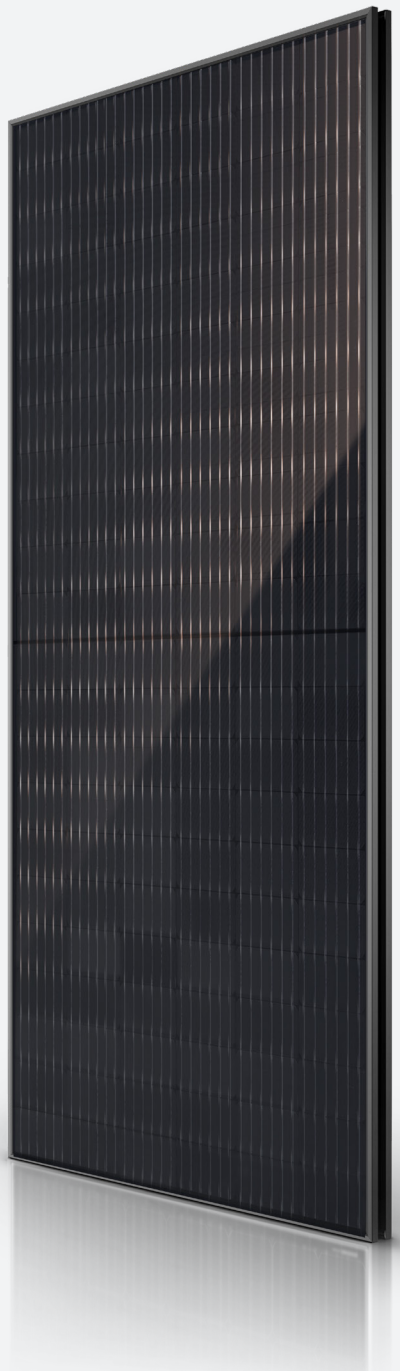
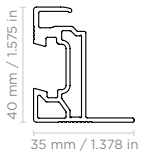
The Tesla module is one of the most powerful residential photovoltaic modules available and exceeds industry engineering and quality standards. Featuring our proprietary Zep Groove design, the all-black module mounts close to your roof for a minimalist aesthetic. Modules are certified to IEC / UL 61730 - 1, IEC / UL 61730 - 2 and IEC 61215.



# Module Specifications




## Electrical Characteristics

| Power Class | T395H | | T400H | | T405H | |
|---|---|---|---|---|---|---|
| Test Method | STC | NMOT | STC | NMOT | STC | NMOT |
| Max Power, $P_{MAX}$ (W) | 395 | 296.3 | 400 | 300.1 | 405 | 303.8 |
| Open Circuit Voltage, $V_{OC}$ (V) | 45.27 | 42.69 | 45.30 | 42.72 | 45.34 | 42.76 |
| Short Circuit Current, $I_{SC}$ (A) | 11.10 | 8.95 | 11.14 | 8.97 | 11.17 | 9.00 |
| Max Power Voltage, $V_{MP}$ (V) | 36.88 | 35.03 | 37.13 | 35.25 | 37.39 | 35.46 |
| Max Power Current, $I_{MP}$ (A) | 10.71 | 8.46 | 10.77 | 8.51 | 10.83 | 8.57 |
| Module Efficiency (%) | ≥ 20.1 | | ≥ 20.4 | | ≥ 20.6 | |
| STC | 1000 W/m², 25°C, AM1.5 | | | | | |
| NOCT | 1000 W/m², 25 ± 2 °C, AM 1.5 according to IEC 60904-3 • 2800 W/m2, NMOT, spectrum AM 1.5 | | | | | |

## Mechanical Loading

| | |
|---|---|
| Front Side Test Load | 6120 Pa \| 128 lb/ ft² |
| Rear Side Test Load | 6120 Pa \| 128 lb/ ft² |
| Front Side Design Load | 4080 Pa \| 85 lb/ft² |
| Rear Side Design Load | 4080 Pa \| 85 lb/ft² |
| Hailstone Test | 25 mm Hailstone at 23 m/s |

## Mechanical Parameters

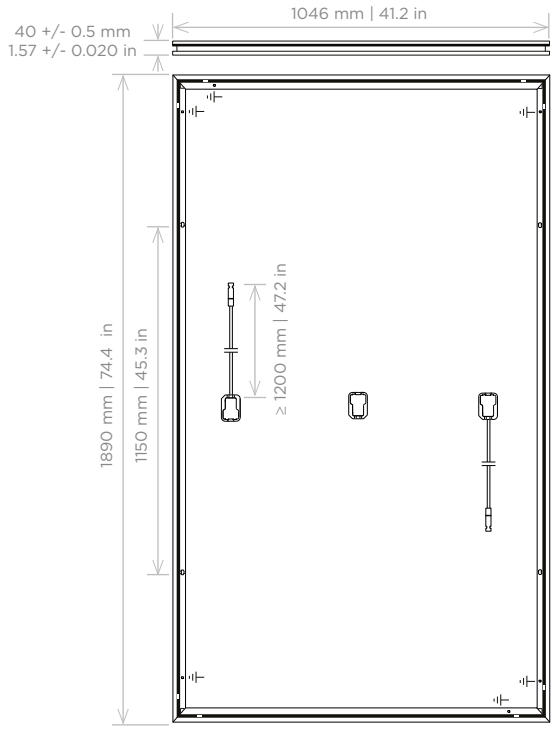
| | |
|---|---|
| Cell Orientation | 132 (6 x 22) |
| Junction Box | IP68, 3 diodes |
| Cable | 4 mm2 \| 12 AWG, 1200 mm \| 47.2 in. Length |
| Connector | Staubli MC4 or MC4 compatible |
| Front Cover | 0.13 in (3.2 mm) thermally pre-stressed glass |
| Frame | Black Anodized Aluminum Alloy |
| Weight | 23.5 kg \| 51.8 lb |
| Dimension | 1890 mm x 1046 mm x 40 mm<br>74.4 in x 41.2 in x 1.57 in |

## Operation Parameters

| | |
|---|---|
| Operational Temperature | -40°C up to +85°C |
| Power Output Tolerance | -0 /+5 W |
| $V_{OC}$ & $I_{SC}$ Tolerance | +/- 3% |
| Max System Voltage | DC 1000 V (IEC/UL) |
| Max Series Fuse Rating | 20 A |
| NOCT | 45.7 +/- 2°C |
| Safety Class | Class II |
| Fire Rating | UL 61730 Type 2 |

## Temperature Rating (STC)

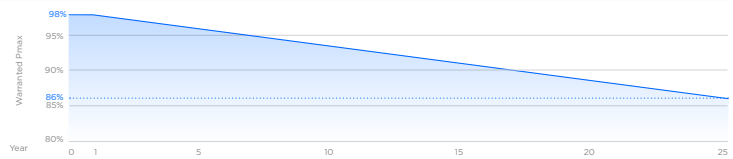
| | |
|---|---|
| Temperature Coefficient of Isc | +0.04% / °C |
| Temperature Coefficient of $V_{OC}$ | -0.27% / °C |
| Temperature Coefficient of $P_{MAX}$ (W) | -0.34% / °C |




## Linear Power Warranty

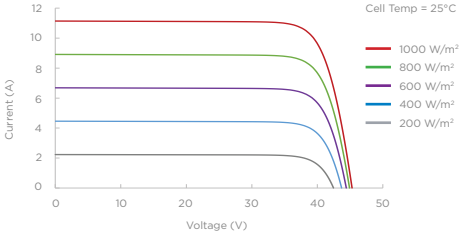
| | |
|---|---|
| Materials and Processing | 25 years |
| Extra Linear Power Output | 25 years |

At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

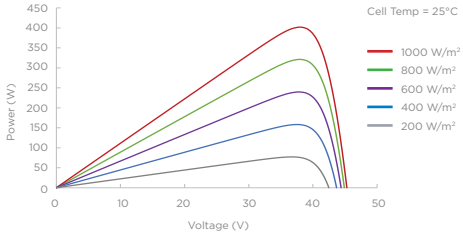



## IV Curves

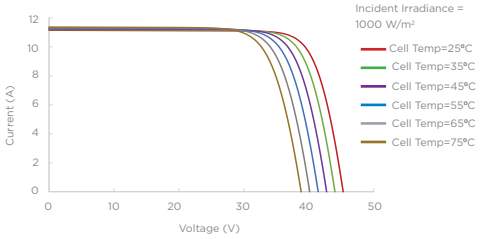
Current vs. Voltage




Power vs. Voltage




Current vs. Voltage



TESLA

| | T400H |
|---|---|
| Maximum power (Pmax) | 400 W +5/-0W |
| Open-circuit voltage (Voc) | 45.30 V±5% |
| Short-circuit current (Isc) | 11.14 A±5% |
| Operating voltage (Maximum Power Voltage, Vmp) | 37.13 V |
| Current at rated operating voltage (Maximum Power Current, Imp) | 10.77 A |
| Maximum system voltage | 1000V |
| Electrical ratings at STC | 1000 W/m², 25°C, AM = 1.5 |
| Module Fire Class C. | See system installation manual for system-level fire rating |
| Module Fire Type | Type 2 |
| Maximum Series Fuse | 20 A |
| Dimensions | 1890mm x 1046 mm x 40mm |

For field connections, use minimum 12 AWG wires insulated for a minimum of 90°C, rated for wet conditions and resistant to ultraviolet radiation (where exposed).

Refer to safety and installation instructions prior to use.

Module produces electricity when exposed to light. Do not connect or disconnect under electrical load.

Avertissement-électrique Danger Ce module produit de l'électricité en exposant à la lumière. Suivez toutes les précautions applicables à la sécurité électrique.

Made in Korea

www.tesla.com

C SA US

WARRANTY VOID IF NON-ZEP-COMPATIBLE HARDWARE IS ATTACHED TO GROOVE IN MODULE FRAME