



TS4-A-O

Module-level PV Optimizer

The TS4-A-O (Optimization) is the advanced add-on optimization solution that brings smart module functionality to standard PV modules for higher reliability. Improve energy efficiency by upgrading underperforming PV systems or adding smart features to new installations.

Complies with 2017 and 2020 NEC rapid shutdown requirements.

The TS4-A-O add-on supports PV modules up to 700W.

Included Features



Module-level **optimization** for increased energy yield and greater design flexibility



Manual or automatic module-level **shutdown**. Complies with NEC 2017 and 2020.



Module-level **monitoring** for energy production tracking and system management

Easy Installation

Snap to standard module frame or remove brackets for rack mounting

Smart Commissioning

Configure and commission with your Android or iOS mobile device



TS4-A-O SPECIFICATIONS

Environmental

Operating Temperature Range	-40°C to +70°C (-40°F to +158°F)
Outdoor Rating	IP68, NEMA 3R
Maximum Elevation	2000m

Mechanical

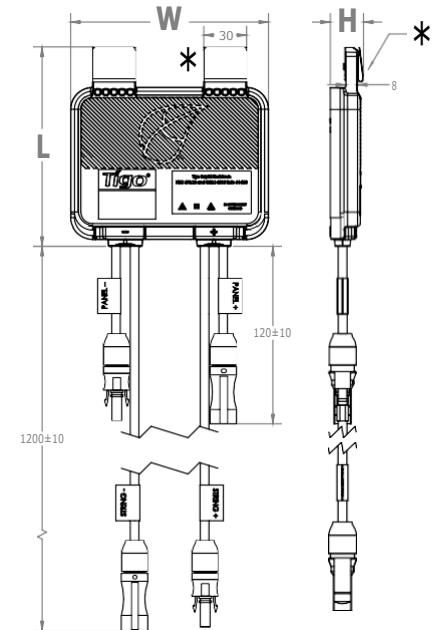
Dimensions	W=138.4mm, L= 139.7mm, H= 22.9mm
Weight	520g

Electrical

Max Input Voltage (V _{oc} @ Lowest Temperature)	80V
Input Voltage Range	16 - 80V*
Maximum Current	15A
Maximum Power	700W
Cable Length (in/out)	0.12/1.2m (standard), 0.62/1.2m (optional)
Connectors	MC4 (standard), EVO2 (optional)
Communication Type	Wireless
Recommended Fuse Rating	30A

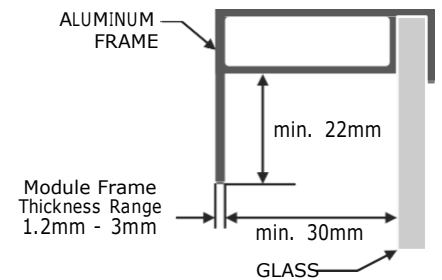
TAP required for module-level shutdown and CCA required for monitoring with TS4-A-O.

*Maximum output voltage of the TS4 is dependent on the PV module voltage. Refer to PV modules nameplate.



*Clips can be removed for rack mounting

Module frame specifications
for mounting TS4-A



ORDERING INFORMATION

Standard	Description
461-00252-32	1500V UL / 1000V IEC, 0.12/1.2m cable, MC4
Options	Description
461-00252-62	1500V UL / 1000V IEC, 0.62/1.2m, MC4
461-00261-62	1500V UL / IEC, 0.62/1.2m, EVO2
461-00261-32	1500V UL / IEC, 0.12/1.2m cable, EVO2

