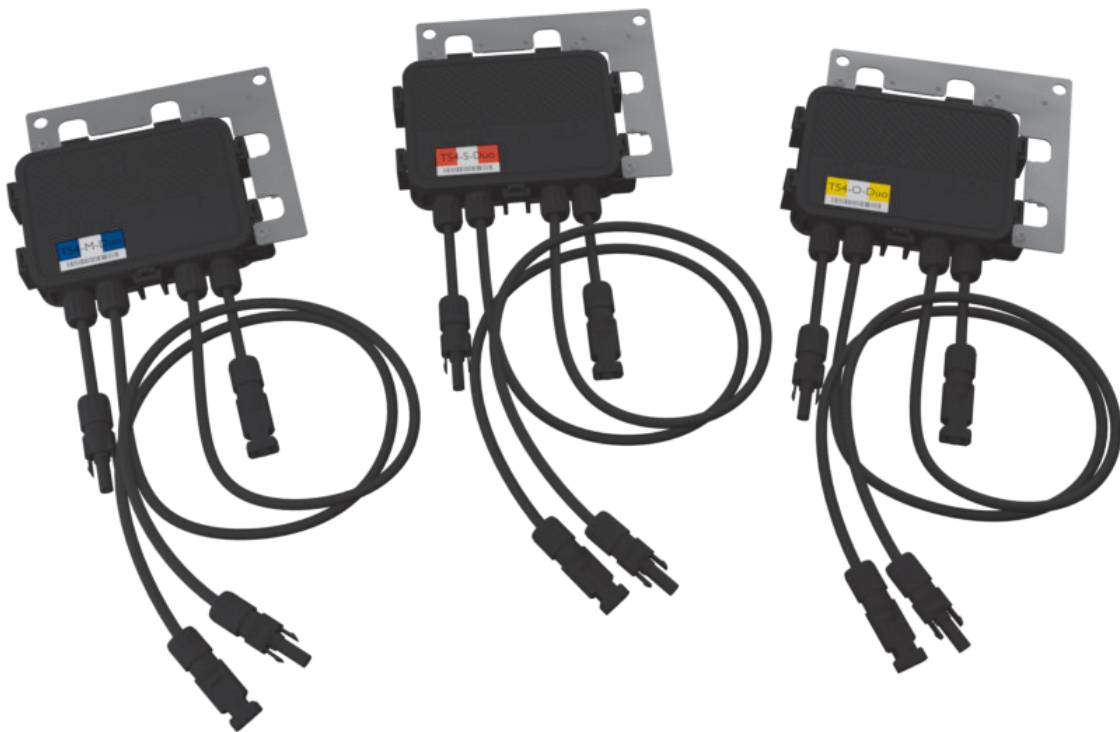


TS4 PLATFORM

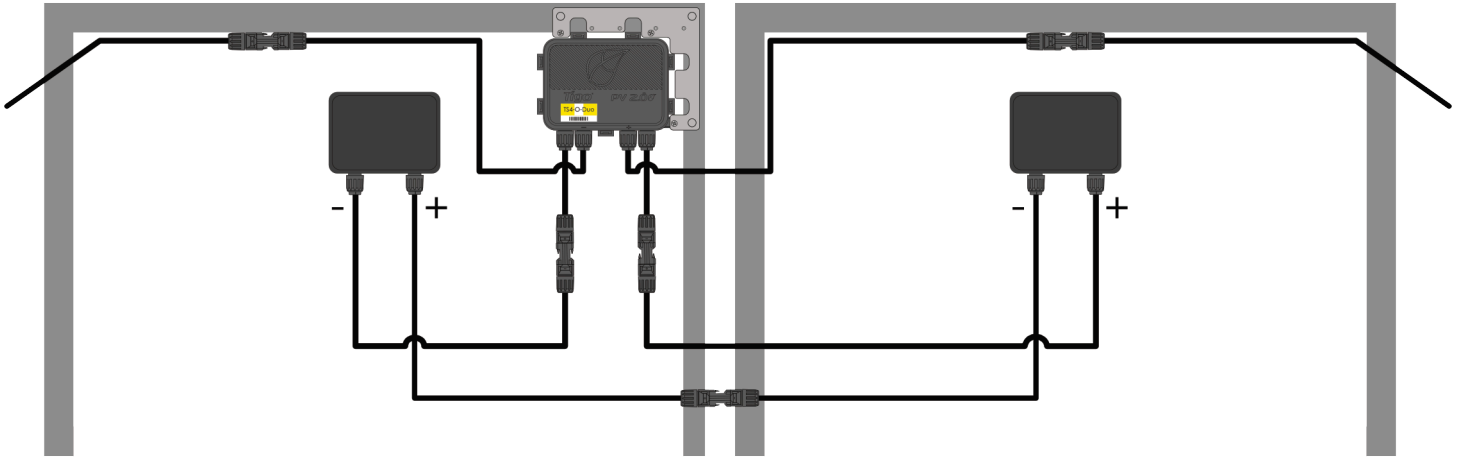
The TS4-R-X-Duo is an add-on or retrofit solution that brings smart module functionality to standard PV modules, adds smart features to new PV installations, or upgrades underperforming systems. The Duo cover with UHD-Core technology and expanded specifications supports two PV modules connected in series with a combined power of up to 700W.



ADD-ON / RETROFIT MODULAR PLATFORM

TS4-R-X-DUO

Type: TS4-R (base up to 1500V)



Installation example: Serial connection of two PV modules to a TS4-R-O-DUO

MECHANICAL SPECIFICATIONS

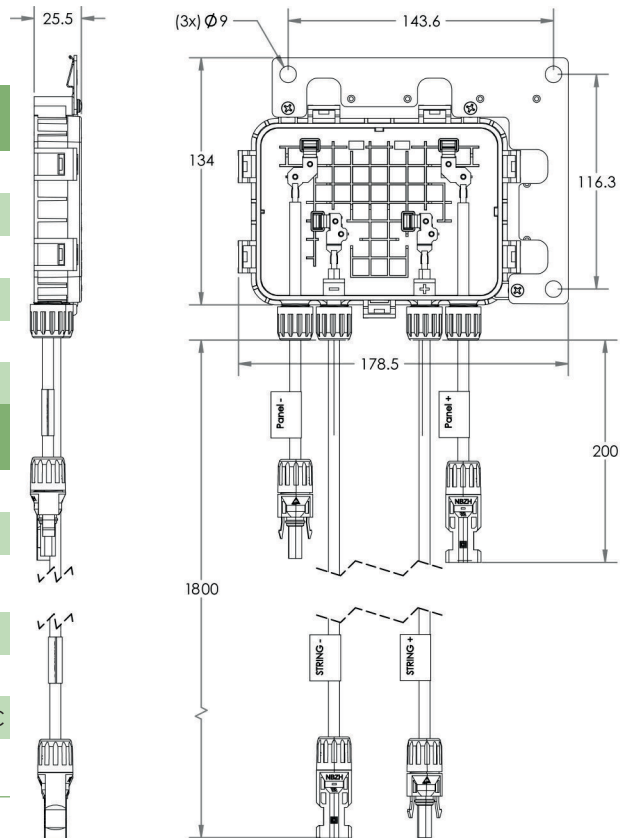
Mechanical

| | |
|-----------------------------|-------------------------------------|
| Operating Temperature Range | -40°C to +75°C (-40°F to +167°F) |
| Storage Temperature Range | -40°C to +75°C (-40°F to +167°F) |
| Cooling Method | Natural Convection |
| Dimensions (with cover) | 178.5mm x 134mm x 25.5mm |
| Weight per unit | 710g (M-Duo or S-Duo), 770g (O-Duo) |
| Outdoor Rating | IP68, NEMA 3R |

Cabling

| | |
|---------------------------|---|
| Type | H1Z2Z2-K |
| Output Cable Length | 1.8m |
| Cable & Connector Options | 1000V rated 1500V rated |
| Cable Cross-Section | 6.4 ± 0.2mm |
| Connectors | MC4, EVO2, UTX, MC4 Compatible |
| UV Resistance | 500hr with UV light between 300-400nm @65°C |
| Maximum String Voltage | 1500V UL/IEC ¹ |

¹ All TS4 covers are 1500V compatible. Specify max system voltage when ordering TS4-R bases for appropriate cables & connectors.



ENHANCE YOUR PV SYSTEMS WITH TS4-R-X-DUO

Tigo has expanded its retrofit platform to provide three more levels of customization. With a universal base and a range of covers containing the Flex MLPE, TS4-R-X-Duo increases your freedom of choice when selecting features for a particular project and budget.

OPTIMIZATION

TS4-R-O-DUO



Monitoring Safety Optimization

- Shade and mismatch tolerance
- Enhanced energy yield
- Greater design flexibility
- Maximized roof usage
- Plus all the benefits of Safety and Monitoring when deployed with communication (optional)

SAFETY

TS4-R-S-DUO



Monitoring Safety

- NEC 690.12 rapid shutdown compliant
- Module-level deactivation
- Automatic or manual shutdown
- Plus all the benefits of Monitoring when deployed with communication (optional)

MONITORING

TS4-R-M-DUO



Monitoring

- Reduced O&M costs
- PV-2.0 data synchronization
- CRM integration
- Fleet management

ELECTRICAL RATINGS



MONITORING
TS4-R-M-DUO



SAFETY
TS4-R-S-DUO



OPTIMIZATION
TS4-R-O-DUO

| INPUT | | | |
|--|---------------------|---------------------|---------------------|
| Maximum DC Input Power | 700W | 700W | 700W |
| Maximum Input Voltage | 90V | 90V | 90V |
| Maximum Continuous Input Current (I _{MAX}) | 12A | 12A | 12A |
| OUTPUT | | | |
| Output Power Range | 0 - 700W | 0 - 700W | 0 - 700W |
| Output Voltage Range | 0 - V _{IN} | 0 - V _{IN} | 0 - V _{IN} |
| Communication Type | 802.15.4 2.4GHz | 802.15.4 2.4GHz | 802.15.4 2.4GHz |
| Rapid Shutdown UL Listed (NEC 2014 & 2017 690.12) | No | Yes | Yes |
| Impedance Matching Capability | No | No | Yes |
| Output Voltage Limit | No | No | No |
| Maximum System Voltage | 1000V / 1500V | 1000V / 1500V | 1000V / 1500V |

ORDERING INFORMATION

| Add-on / Retrofit Unit | 1000V TÜV / UL, MC4, 1.8m cable |
|--------------------------|---------------------------------|
| TS4-R-M-Duo | Monitoring |
| TS4-R-S-Duo | Safety |
| TS4-R-O-Duo | Optimization |
| Options | |
| <input type="checkbox"/> | 1500V TÜV / UL |

All TS4 covers are 1500V compatible. Specify max system voltage when ordering TS4-R bases for appropriate cables & connectors.

For sales info:

sales@tigoenergy.com or 1.408.402.0802

For product info:

Visit www.tigoenergy.com/products

For TS4-R add-on / retrofit units:

Contact your local distributor or sales@tigoenergy.com

For technical info:

<http://support.tigoenergy.com>

For additional info and product selection assistance, use Tigo's online design tool at www.tigoenergy.com/design

