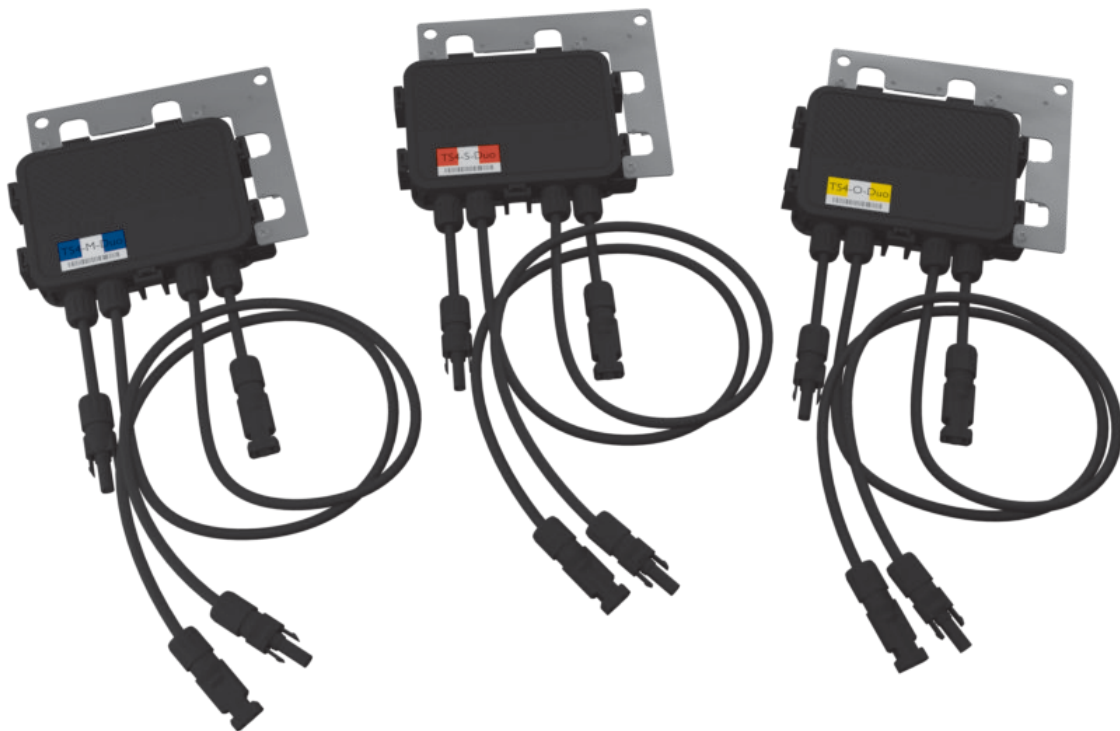


TS4 PLATFORM

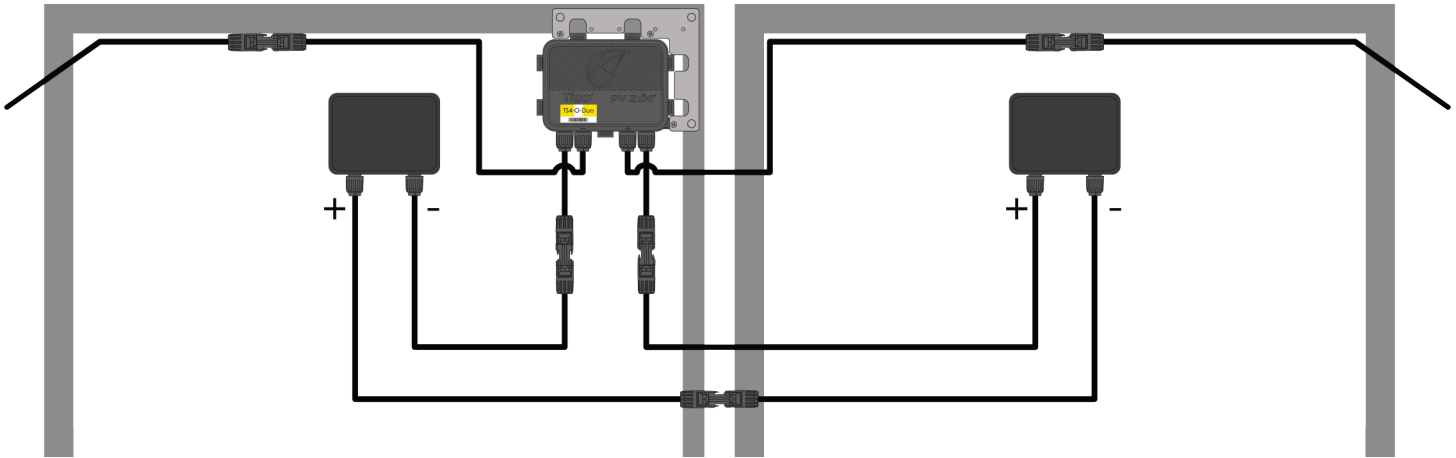
The TS4-R-X-Duo is an add-on or retrofit solution that brings smart module functionality to standard PV modules, adds smart features to new PV installations, or upgrades underperforming systems. The Duo cover with UHD-Core technology and expanded specifications supports two PV modules connected in series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

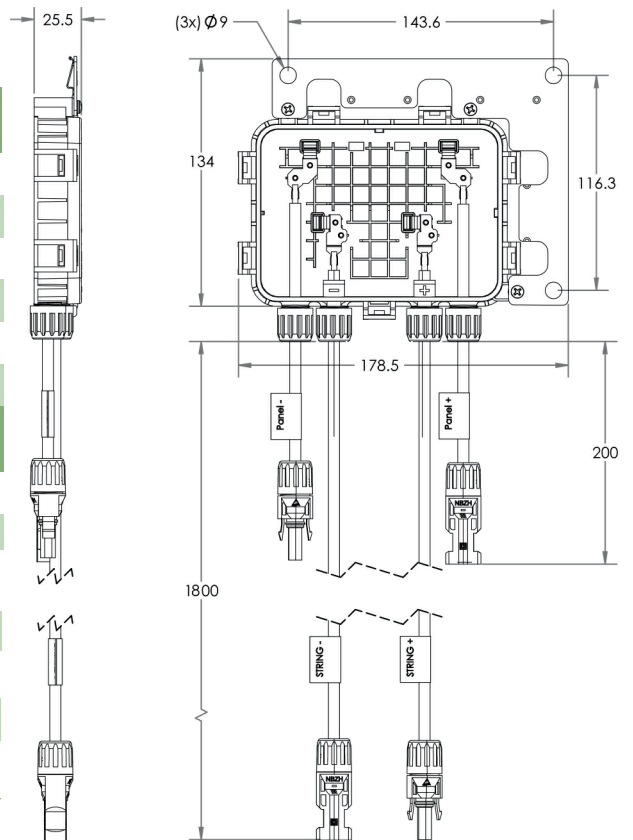
Mechanical

Operating Temperature Range	-30°C to +75°C (-22°F to +167°F)
Storage Temperature Range	-30°C to +75°C (-22°F to +167°F) Natural
Cooling Method	Convection
Dimensions (with cover)	178.5mm x 134mm x 25.5mm
Weight per unit	770g (O-Duo), 710g (S-Duo, M-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, 7.05 ± 0.2mm
Connectors	MC4, EVO2, UTX, MC4 Compatible Connectors
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.



*All dimensions are in mm

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

Tigo has expanded its retrofit platform to provide three more levels of customization for smart modules. 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	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
Connector 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:

Contact your local distributor or sales@tigoenergy.com

For product info:

www.tigoenergy.com/products

For technical info:

<http://support.tigoenergy.com>

For product selection assistance,

use Tigo's online design tool at www.tigoenergy.com/design

