**TS4-A-O-DUO**

**PV Module Advanced Add-On**

The TS4-A-O-Duo (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.

The TS4-A-O-Duo with UHD-Core technology and expanded specifications supports two PV modules connected in series with a combined power of up to 700W.

**Included Features**

- **Optimization** for increased energy yield and greater design flexibility
- **Manual or automatic shutdown**
- **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-DUO SPECIFICATIONS

## Environmental
- **Operating Temperature Range**: -40°C to +85°C (-40°F to +185°F)
- **Outdoor Rating**: IP68
- **Maximum Elevation**: 2000m

## Mechanical
- **Dimensions**: 138.4mm x 139.7mm x 22.9mm
- **Weight**: 560g

## Electrical
- **Total Max Input Voltage ($V_{oc}$ @ Lowest Temperature)**: 90V
- **Voltage Range**: 16 - 90V
- **Maximum Current**: 12A
- **Maximum Power**: 700W
- **Output Cable Length**: 1.8m (standard)
- **Connectors**: MC4 (standard)
- **Communication Type**: Wireless

Cloud Connect Advanced (CCA) is required for monitoring and TAP is required for shutdown with TS4-A-O-Duo.

## ORDERING INFORMATION

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<tr>
<th>Standard</th>
<th>1000V UL / TÜV, 1.8m cable, MC4</th>
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