



TS4-A-S (725 W)

Module-level monitoring and rapid shutdown

Tigo TS4-A-S module-level power electronics (MLPE) improves production, enhances safety, and adds intelligence to both new and existing systems. With patented technology, it offers superior performance and high efficiency, delivering a fast return on investment. Its easy installation and long-lasting reliability reduce system downtime and operational costs. Additionally, Tigo's Energy Intelligence platform accelerates onsite commissioning and provides comprehensive remote monitoring. By incorporating module-level monitoring and rapid shutdown, O&M expenses and truck rolls are significantly minimized.

Features

- Rated 725 W, 22 A I_{SC} / 16 A I_{MP} to accommodate high-power, high-current modules
- Simple, fast installation – snaps to a standard PV module frame or mounts to racking
- Module-level monitoring – full visibility into module- and system-level production
- Rapid shutdown – a UL Standards-certified component for photovoltaic rapid shutdown systems (PVRSS) worldwide
- Required – Tigo Access Point (TAP) and Cloud Connect Advanced (CCA) for rapid shutdown and module-level monitoring
- Multi-factor Rapid Shutdown capability for enhanced safety when combined with RSS Transmitter (optional)
- Works with thousands of different inverter models from more than 50 inverter brands
- Up to 25 years*

Specifications

Electrical	
Input current (I_{MP}/I_{SC})	16 A / 22 A
Input voltage range (V_{MP})	12 – 80 V
Maximum system voltage	1000 V/1500 V
Maximum output power (P_{MAX})	725 W
Maximum efficiency	99.6%
Recommended fuse rating	30 A
AS 5033: Operational Output	
Maximum output current	$I_{DCU MAX}$
Maximum output voltage	$V_{DCU MAX}$
Maximum output power	$P_{DCU MAX}$
Rapid Shutdown	
TS4 conductor	12 AWG
Rapid shutdown time limit	<30 sec.
PVRSE-controlled conductor limits	$\leq 240 VA, \leq 8 A, \leq 30 V_{DC}$
UL 1741-compliant PVRSE	Yes
Communications	Wireless 2.4 GHz ¹ and/or PLC ²

¹ Using Tigo Access Point (TAP) and Cloud Connect Advanced (CCA)

² Using Tigo RSS transmitter power-line communications



Specifications

Connections

Connectors MC4/EVO2

For cable length details, refer to the ordering information below

Environmental

Operating temperature range -40 – 85 °C (-40 – 185 °F)

Storage temperature range -20 – 65 °C (-4 – 149 °F)

Maximum elevation 3000 m (9840 ft.)

Outdoor IP rating IP68

Mechanical

Dimensions (H/W/D) 139.7 x 138.4 x 22.9 mm
(5.4 x 5.5 x 0.9 in.)

Weight 520 g (1.15 lb.)

General

Standards compliance

US FCC, IC Canada, CE- EMC, CE-LVD, CE-RED,
CE-RoHS, TUV-IEC 62109, ANSI/UL/CAN 1741, UL1741
PVRSE/PVRSS, US NEC 690/12, ANSI/UL/CAN 3741,
CSA 22.2-106, CSA 22.2-330 PVRSE/PVRSS

Warranty* Up to 25 years

* The Warranty period is 5 years from the date of original installation. To extend to a full 25-year Warranty, Tigo requires all system components with connection capability (TS4-A-S, TS4-A-O, CCA and TAP) to stay connected to the Tigo Energy Intelligence platform throughout the Warranty Period, allowing for remote monitoring and firmware updates. Exclusions and limitations apply. Click here for full warranty details.

<https://www.tigoenergy.com/downloads?type-detail=Warranty>

Ordering Information

Part Number	Cable Lengths* IN/OUT	Connectors	V _{MAX}	Certifications UL/IEC
516-340112-2001	0.1/1.2 m	MC4	1500 V	1000 V
516-340612-2001	0.6/1.2 m	MC4	1500 V	1000 V
516-341220-2001	1.2/2.0 m	MC4	1500 V	1000 V
516-320112-2001	0.1/1.2 m	EVO2	1500 V	1500 V
516-320612-2001	0.6/1.2 m	EVO2	1500 V	1500 V
516-321220-2001	1.2/2.0 m	EVO2	1500 V	1500 V

* Refer to image. Cable lengths are +/- 0.05m.

More Resources

