

Easy to install and commission for Rapid Shutdown PV arrays and NEC 2017 compliance

MPPT Disconnect RS

A Rapid Shutdown transmitter, arc fault detection, and PV disconnect for use with MPPT 60 150, MPPT 80 600, and MPPT 100 600 charge controllers



Solution at a glance

The MPPT Disconnect RS is an accessory for the Conext™ MPPT charge controllers. It provides a disconnect for the photovoltaic (PV) circuits, an integrated Rapid Shutdown transmitter, and arc fault detection for enhanced safety.

The MPPT Disconnect RS provides simplified NEC 2017 Compliance

- Integrated Rapid Shutdown transmitter using power line communication (PLC)
- Tested and PVRSS certified with Tigo® TS4-F range of Fire Safety receivers
- Arc fault detection certified to UL 1699B
- Compatible with Conext™ MPPT 100 600, MPPT 80 600, and MPPT 60 150 charge controllers

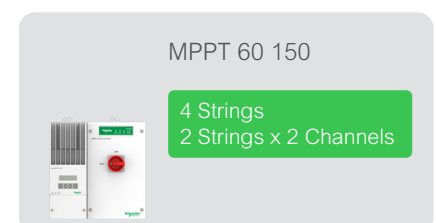
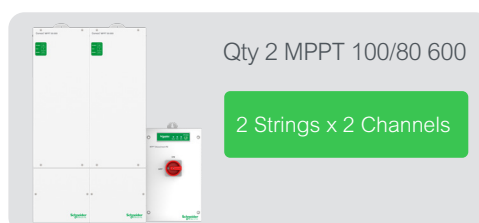
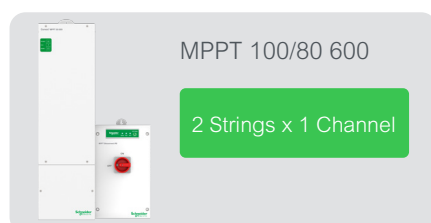
Integrated PV Disconnect

- 2 leg disconnect, compliant with NEC 2017
- LOTO capability
- 2 input channels with up to 2 strings per channel

Flexible Installation

- Multiple configurations with Conext™ MPPT charge controllers
- Single Rapid Shutdown Initiator Switch can be used with multiple MPPT Disconnect RS for larger systems
- Side or bottom cable entry
- Mount on either side of the Conext™ MPPT charge controllers

Charge Controller Configurations with MPPT Disconnect RS



Technical Specifications

MPPT Disconnect RS

Device short name	MPPT Disconnect RS
Electrical specifications	
Max. PV array open circuit voltage	600 VDC
Max. array short-circuit current ¹	32 A (25.6 A @ STC) x 2 channels
Max. and min. PV input/output wire size	#6 AWG to #14 AWG (13.5 to 2.5 mm ²)
Control power input	48 VDC nominal (22-60 VDC)
General specifications	
PV Disconnect	2 channel, 4 pole DC disconnect switch
Arc fault circuit protection ²	Type 1
Rapid Shutdown	PLC transmitter included; Rapid Shutdown Initiator Switch ordered separately
Network communications	Xanbus
Enclosure type	Type 1, indoor rated
Product weight	4.5 kg (10 lb)
Product dimensions (H x W x D)	36.8 x 22 x 14.5 cm (14.48 x 8.66 x 5.7 in)
Shipping dimensions (H x W x D)	28.5 x 44.0 x 29.0 cm (11.22 x 17.32 x 11.41 in)
Ambient air temperature for operation	-20°C to +50°C (-4°F to 122°F)
Operating altitude	Sea level to 2000 m (6562 ft)
Regulatory	
Safety	UL1741, UL1741 CRD - PV Rapid Shutdown Systems (PVRSS), UL1699B, CSA C22.2 No. 107.1-16, CSA C22.2 No. 292-18, CSA (LTR) No. AE-004-2015
EMC	FCC and Industry Canada (Class B)
Rapid Shutdown Initiator Switch (Ordered separately)	
Enclosure type	Type 4X, outdoor rated
Ambient air temperature for operation	-20°C to +50°C (-4°F to 122°F)

1. Refer to MPPT Charge Controller data sheet for total allowable short circuit current
2. With Xanbus communication to MPPT charge controller

Compatible Product Part Numbers And Example Configurations

Products	Part Number	1 x MPPT 100/80	2 x MPPT 100/80	3 x MPPT 100/80	4 x MPPT 100/80	1 x MPPT 60	2 x MPPT 60	3 x MPPT 60	4 x MPPT 60
Bill of Materials									
MPPT 100 600 or MPPT 80 600	865-1034 or 865-1032	1	2	3	4	-	-	-	-
MPPT 60 150	865-1030-1	-	-	-	-	1	2	3	4
MPPT Disconnect RS	865-1036	1	1	2	2	1	2	3	4
RS Initiator Switch	865-1039	1	1	1	1	1	1	1	1
PV Rapid Shutdown	PVRSS Certified with Tigo TS4-F, TS4-A-F, TS4-A-2F, TS4-R-F (Fire Safety)								

Example System Solution with MPPT Disconnect RS

