

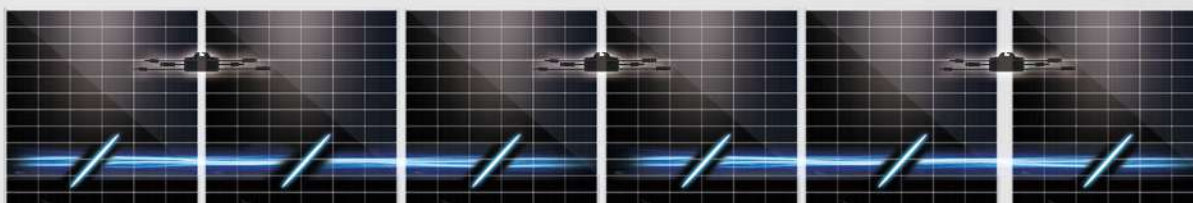


R Series Module-Level Micro Controller Rapid Shutdown Function Series



Module-Level Rapid Shutdown

Reduce the voltage to 1V within 30s. Meet the most stringent photovoltaic safety regulations in the United States



The R series module-level micro-controller has a module-level rapid shutdown function, meeting the US NEC 690.12-2014, 2017 and 2020 photovoltaic safety requirements. In an event of emergency, the micro-controller will automatically disconnect the output of each module to ensure system safety.

Users can also switch to safe mode through emergency button or APP or switching off the AC power.



Reduce the voltage to 1V within 30s

Compatible with any third party PV inverters
Achieving module-level safe and rapid shutdown within 30s (safety mode)



Online and offline shutdown at any time

Multiple mechanisms to activate safety mode (automatic/manual/APP)
Providing the highest safety protection anytime and anywhere



Multiple efficient and convenient installation methods

Installed on the bracket or the edge of the solar panel using M6 bolts or directly buckle it

Technical Parameters	APT-MC-R-T1	APT-MC-R-T2
Function	Module-level Rapid shutdown	Module-level Rapid shutdown
Number of Modules Connected	1	2
Input		
Rated Input Power	800W	1600W
Input Voltage Range	10V-80V	10V-80V*2
Max. Operating Current (Imp)	20A / 25A (Optional)	20A / 25A (Optional)
Max. Short-circuit Current (Isc)	25A / 31.2A (Optional)	25A / 31.2A (Optional)
Max. Efficiency	> 99.5%	> 99.5%
Output		
Max. Output Voltage	80V	160V
Max. Output Current	20A / 25A (Optional)	20A / 25A (Optional)
Bypass Output	✓	✓
Output Shutdown Voltage	1V	<1.5V
Shutdown Response Time	30s	30s
Communication		
Communication Mode	PLC	PLC
Compatible Data Controller	DCON-S	DCON-S
Safety Certification		
Safety	UL1741 / CSA C22.2 No.107.1 / CSA C22.2 No.330 comply with NEC Code Article 690.12 module-level shutdown characteristics	
EMC	FCC part 15b	
RoHS Certification	✓	✓
General Parameters		
Dimensions (L x W x D)	144 x 50 x 16.9 mm	143 x 62 x 19.5 mm
Weight (Including Cables)	0.45KG	0.76KG
Input and Output Terminals	MC4 / Compatible with MC4 / Customized	MC4 / Compatible with MC4 / Customized
Length of Output Cable	1.2m / Customized	1.2m / Customized
Operating Temperature Range	-40°C to +85°C	-40°C to +85°C
Humidity Range	0%-100%	0%-100%
Protection Rating	IP68	IP68
Max.System Voltage	1000V / 1500V (Optional)	1000V / 1500V (Optional)

