

RSD Receiver



The Rapid Shutdown (RSD) Receiver from GoodWe is a key component of the RSD 2.0 solution for PV systems, can be connected with a single module. Functioning as a module-level rapid shutdown device, it enhances fire safety for solar rooftops and buildings. The Receiver ensures the normal operation of modules by consistently receiving a PLC keep-alive signal from a transmitter integrated into GoodWe's inverters or an external transmitter. During emergencies, the module-level rapid shutdown is activated when the transmitter loses power and the signal becomes absent. In addition, when the external RSD initiator is pressed, the modules can also be shut down.



Plug & Play for easy installation



Supports PLC communication

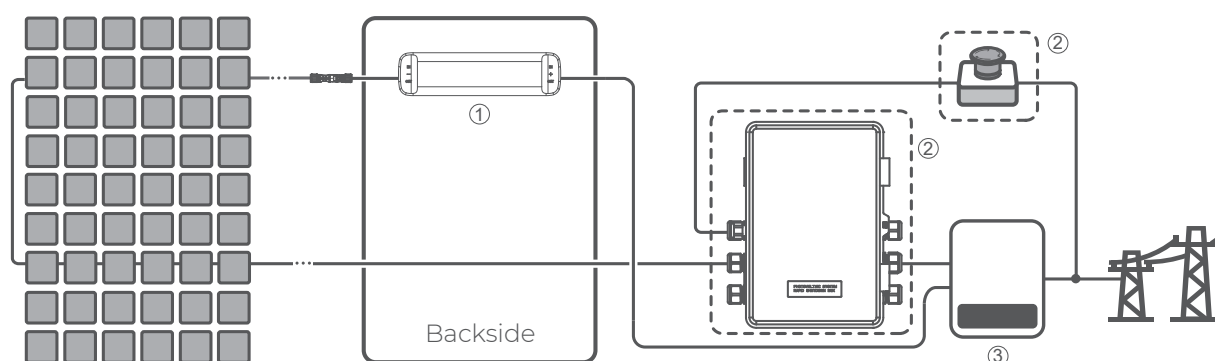


Integrated SoC for high reliability



Meets NEC 2017/2020 requirements and SunSpec certified

Solution Diagram



- ① RSD Receiver - on the backside of modules
- ② External Transmitter and Initiator - An external transmitter and an external initiator should be added if the inverter does not include an integrated transmitter
- ③ Inverter

Receiver

Technical Data		GR-B1F-20
Max. Number of Shutdown Module		1
Operating Voltage Range (V)		8 ~ 80 Per channel
Rated Input Current (A)		22
Max. Voltage of each PV Module after Shutdown (V)		1.3
Mode of Communication		PLC
Operating Temperature Range (°C / °F)		-40 ~ +85°C (-40 ~ +185°F)
Ingress Protection Rating		IP68 / UL Type 6P
Maximum System Voltage (V)		1500
Security Certification	NEC 2017 & 2020 & 2023 (690.12); UL1741; CSA C22.2 No. 330; IEC / EN62109-1	
EMC Certification	FCC Part15; ICES-003; IEC / EN61000-6-1 / -2 / -3 / -4	
SunSpec Protocol	Support	
Dimension (W × H × D mm / in)	140 × 37 × 23 mm (5.51 × 1.46 × 0.91 in)	
Cable Length (m / in)	① In: 0.2m, Out: 0.8m (In: 7.87 in, Out: 31.50 in) (Integrated Junction Box) ② In: 1.2m, Out: 0.8m (In: 47.24 in, Out: 31.50 in) (Triad Junction Box) or Customize	
Connector	MC4 or Customize	

Waterproof Box-Type PACK with RSD2.0 Transmitter

Technical Data		GTP-F2L-20
Main Electrical Data		
Power Supply Input Voltage (Vac)		100 ~ 240
Max. Power Supply Input Current (A)		0.15
Nominal Frequency (Hz)		50 / 60Hz
Transmitter Input Voltage (Vdc)		12
Transmitter Input Current (DC) (A)		0.8
Communication		SunSpec PLC
Overvoltage Category		AC III
Core Data		
Number of Core		150A Core × 2
Max. Current (A)		150 × 2
Max. System Voltage (Vdc)		1500
Core Line Length (mm / in)		150 mm (5.91 in)
Internal Dimensions / Outside Dimensions (mm / in)		30 / 60 mm (1.18 / 2.36 in)
Max Number of Strings ^{*1}		30 (Max. 15 Per Core)
Environmental		
Operating Temperature (°C / °F)		-40 ~ +60°C (-40 ~ 140°F)
Relative Humidity		0 ~ 100%
Max. Operating Altitude (m)		3000
Enclosure Environmental Rating		IP65 / UL Type 4
Mechanical		
Dimensions (W × H × D mm / in)		253 × 328 × 179 mm (9.96 × 12.91 × 7.05 in)
Weight (kg)		2.4
Mounting Type		Wall Mounted
Pollution Degree		III
Features & Compliance		
Safety Compliance	NEC 2017 & 2020 (690.12); UL1741; CSA C22.2 No. 330-17	
EMC Compliance	FCC Part 15B, ICES-003, IEC / EN61000-6-1 / -2 / -3 / -4	

*1: According to the cable diameter $\phi 5.9\text{mm}$, if cable diameter is more than 5.9mm, the number of strings per core will be reduced. Care should also be taken not to exceed the allowable current.
 *: Please visit GoodWe website for the latest certificates.