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

www.goodwe.com
### Receiver

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>GR-A1F-20</th>
<th>GR-B1F-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Voltage Range (V)</td>
<td>8 ~ 80 Per channel</td>
<td></td>
</tr>
<tr>
<td>Rated Input Current (A)</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Mode of Communication</td>
<td>PLC</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature Range (°C / °F)</td>
<td>-40 ~ +85°C (-40 ~ +185°F)</td>
<td></td>
</tr>
<tr>
<td>Ingress Protection Rating</td>
<td>IP68 / UL Type 6P</td>
<td></td>
</tr>
<tr>
<td>Maximum System Voltage (V)</td>
<td>1100</td>
<td>1500</td>
</tr>
<tr>
<td>Security Certification</td>
<td>NEC 2017 &amp; 2020 &amp; 2023 (690, 12); UL1741; CSA C22.2 No. 330; IEC / EN62109-1</td>
<td></td>
</tr>
<tr>
<td>EMC Certification</td>
<td>FCC Part15; ICES-003; IEC / EN61000-6-1 / -2 / -3 / -4</td>
<td></td>
</tr>
<tr>
<td>Whether the SunSpec Protocol is Supported</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Dimension (W × H × D mm / in)</td>
<td>140 x 37 x 23 mm (5.51 x 1.46 x 0.91 in)</td>
<td></td>
</tr>
<tr>
<td>Cable Length (m / in)</td>
<td>① In: 0.2m, Out: 0.8m (In: 7.87 in, Out: 31.50 in) (Integrated Junction Box)</td>
<td>② In: 1.2m, Out: 0.8m (In: 47.24 in, Out: 31.50 in) (Triad Junction Box) or Customize</td>
</tr>
<tr>
<td>Connector</td>
<td>MC4 or Customize</td>
<td></td>
</tr>
</tbody>
</table>

### Waterproof Box-Type PACK with RSD2.0 Transmitter

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>GTP-F1L-20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Electrical Data</strong></td>
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</tr>
<tr>
<td>Power Supply Input Voltage (Vac)</td>
<td>85 ~ 264</td>
</tr>
<tr>
<td>Transmitter Input Voltage (Vdc)</td>
<td>12</td>
</tr>
<tr>
<td>Transmitter Input Current (DC) (A)</td>
<td>0.8</td>
</tr>
<tr>
<td>Communication</td>
<td>SunSpec PLC</td>
</tr>
<tr>
<td><strong>Core Data</strong></td>
<td></td>
</tr>
<tr>
<td>Max. Current (A)</td>
<td>150</td>
</tr>
<tr>
<td>Max. System Voltage (Vdc)</td>
<td>1500</td>
</tr>
<tr>
<td>Core Line Length (mm / in)</td>
<td>150 mm (5.91 in)</td>
</tr>
<tr>
<td>Internal Dimensions / Outside Dimensions (mm / in)</td>
<td>30 / 60 mm (1.18 / 2.36 in)</td>
</tr>
<tr>
<td>Max Number of Strings*1</td>
<td>15</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature (°C / °F)</td>
<td>-40 ~ +60°C (-40 ~ 140°F)</td>
</tr>
<tr>
<td>Enclosure Environmental Rating</td>
<td>IP65 / UL Type 4</td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td></td>
</tr>
<tr>
<td>Dimensions (W × H × D mm / in)</td>
<td>253 x 328 x 179 mm (9.96 x 12.91 x 7.05 in)</td>
</tr>
<tr>
<td>Mounting Type</td>
<td>Wall Mounted</td>
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<tr>
<td><strong>Features &amp; Compliance</strong></td>
<td></td>
</tr>
<tr>
<td>Safety Compliance</td>
<td>NEC 2017 &amp; 2020 (690, 12); UL1741; CSA C22.2 No. 330-17</td>
</tr>
<tr>
<td>EMC Compliance</td>
<td>FCC Part 15B; ICES-003; IEC / EN61000-6-1 / -2 / -3 / -4</td>
</tr>
</tbody>
</table>

*1: According to the cable diameter φ5.9mm, 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.