



SolarEdge

Monitoring Combiner Box with GFDI



Ensure field operation with maximum safety

- Outdoor string combiner box, ETL listed according to UL1741
- Fuse per input (replaceable)
- Web-based string performance monitoring
- Per string ground fault detection and automatic isolation
- Automatic self-testing of main components
- Communication to monitoring web server via Zigbee, RS485 or Ethernet
- Remote control of cabinets from web server
- NEMA 4 - Outdoor installation (NEMA 4X optional)



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Monitoring Combiner Box with GFDI

SECB-16
SECB-36
SECB-64

The SolarEdge Monitoring Combiner Box with GFDI allows to enjoy a high level of system performance monitoring and exceptional system safety. 16, 36 or to 64 string combiners are available.

The box detects string leakage and isolates the faulty string, ensuring other strings are not affected and inverter can continue working.

Monitoring provides on-site and web indication as well as email fault notification.

The box includes built in fuse holders that meet the NEC string fusing requirements.

TECHNICAL DATA

| | 16-string Box | 36-string Box | 64-string Box | |
|---|--|----------------|-----------------|-------|
| ELECTRICAL SPECIFICATIONS | | | | |
| Maximum Number of inputs | 16 | 36 | 64 | |
| Maximum Input Voltage | 600 | | | Vdc |
| Maximum Input Current per String | 9.6 | 6.4 | | Adc |
| Fuse Rating Per Input | 12 | 8 | | A |
| Maximum Output Current | 192 (1 output) | 288 (1 output) | 512 (2 outputs) | Adc |
| AC Voltage Rating | 90 - 240 | | | Vac |
| AC Frequency (Nominal) | 50 - 60 | | | Hz |
| Power Consumption | < 80 | < 150 | < 250 | W |
| GROUND FAULT DETECTION AND ISOLATION | | | | |
| Threshold Range (Programmable) | 50 - 400 | | | mA |
| Detection Resolution | ± 10 | | | mA |
| Minimum Time From Leakage Detection to String Isolation | < 750 | | | msec |
| MONITORING AND FAULT DETECTION CAPABILITIES | | | | |
| Instantaneous String Current | Yes, ± 5% accuracy | | | A |
| Output Voltage | Yes, ± 5% accuracy | | | V |
| Continuous String Charge | Yes, ± 5% accuracy | | | Wh |
| Ground Leakage Detection and Isolation | Yes | | | |
| Leakage Sensor and String Circuit Breaker Monitoring | Yes | | | |
| Combiner Box-Web Communications (Data and Control) | Yes | | | |
| Web Portal, Email Notification and Logging in Case of Leakage, Sensor Fault and Breaker Fault | Yes | | | |
| Graphic User Interface for Configuration, Monitoring and Control | Yes, on-site via technician laptop | | | |
| ADDITIONAL FEATURES | | | | |
| Display | LCD and LED for full status review | | | |
| On-site Master Shutdown | Yes | | | |
| Lightning Protection (Per String and per Cabinet) | Yes - 600 Vdc / 10kA - 8/20 μs | | | |
| Supported Communication Interfaces | RS485, USB, Ethernet, ZigBee (optional) | | | |
| STANDARD COMPLIANCE | | | | |
| Electromagnetic Compatibility | FCC Part15 Class B | | | |
| Safety | ANSI/UL Std. 1741 certified | | | |
| INSTALLATION SPECIFICATIONS | | | | |
| Dimensions (D x W x H) | 8 x 36 x 36 | 12 x 36 x 42 | 12 x 36 x 60 | in |
| Weight | 160 | 275 | 440 | lb |
| Operating Temperature Range | -4 - 104 | | | °F |
| Protection Rating | NEMA4 (4X optional) | | | |
| Relative Humidity | 0 - 100 | | | % |
| Wiring Temperature Rating | 165 | | | °F |
| Input Wiring Gauge | 8 - 16 | | | AWG |
| Output Wiring Gauge | 1x350 | 1x500 / 2x350 | 2x500 | kcmil |
| Material | 14 gauge steel with polyester powder paint | | | |
| Storage Temperature Range | -4 - +140 | | | °F |
| Storage Humidity Range | 0 - 95 | | | % |

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