

Remote Annunciator



The RDP-110 is a powerful remote display to match Blue Star Power Systems, Inc's DGC-2020 control panel. It may be powered from the engine starting batteries at 12 or 24VDC or an AC source at 120VAC. The RDP-110 uses RS-485 communications between itself and the DGC to reduce the number of wires required to activate all the alarms to four. The RS-485 communications can be used on remote displays up to 4000 feet away from the DGC. The RDP-110 has 18 LEDs to indicate Alarms, Pre-Alarms and operating conditions of the emergency standby generator system. It has an audible alarm horn rated at 80db (from a distance of two feet). The RDP-110 also comes complete with a conduit box for easy installation. The RDP-110 is available in two mounting configurations: surface and semi-flush mount.



Standard Features

- ▶ Annunciation of 16 alarms and pre-alarms as detected by the DGC
- ▶ Annunciation of 2 status indicators
- ▶ Audible alarm horn
- ▶ Lamp Test and Alarm Silence switches
- ▶ Power supply inputs for 12, 24VDC or 120VAC (at the RDP-110 location)
- ▶ RS-485 communications
- ▶ Two mounting configurations
- ▶ Conduit box included
- ▶ Designed for use in harsh environments
- ▶ UL recognized & CSA certified

Specifications

Power Input

- ▶ DC Voltage: 8-32VDC (2W max.)
- ▶ AC Voltage: 84-144VAC (5VA max.)

Communications Port

- ▶ RS-485 interface with DGC

Isolation

- ▶ 1800VDC for one minute between chassis ground and AC voltage input. 700VDC for one minute between any of the following groups:
 - Chassis ground
 - Battery and RS-485 terminals
 - AC voltage inputs

Operating Range

- ▶ Up to 4000 ft. from the DGC
- ▶ Recommended Wire - Belden 9463

RFI (Radio Frequency Interference)

- ▶ Type tested using a 5W handheld transceiver operating at random frequencies centered around 144MHz and 440MHz with the antenna located within six inches of the device in both vertical and horizontal planes

Environmental and Physical

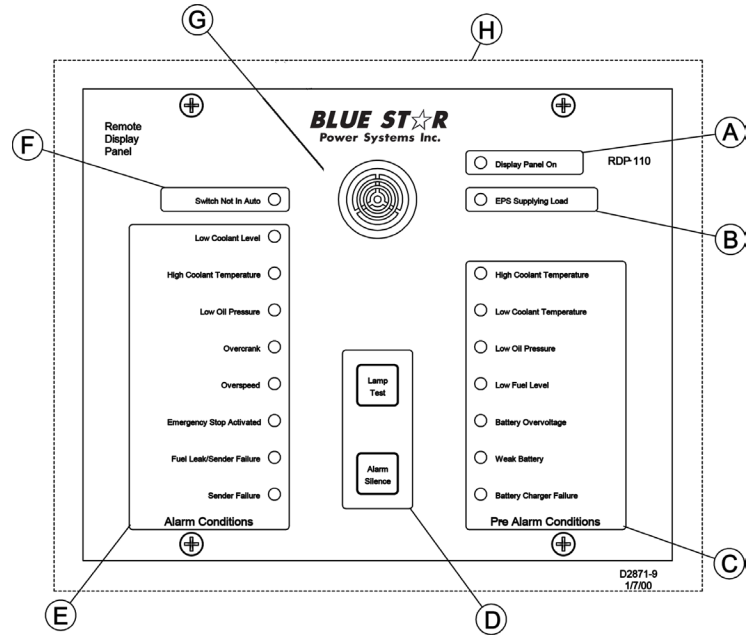
- ▶ Operating temperature: -40°F to +158°F
- ▶ Storage temperature: -40°F to +185°F
- ▶ Salt Fog: Qualified to ASTM 117B-1989
- ▶ Vibration: The device withstands 2g in each of three mutually perpendicular planes, swept over the range of 10 - 500Hz for a total of six sweeps, 15 minutes each sweep, without structural damage or degradation of performance
- ▶ Shock: 15g
- ▶ Weight: 6.5 pounds (3 kilograms)

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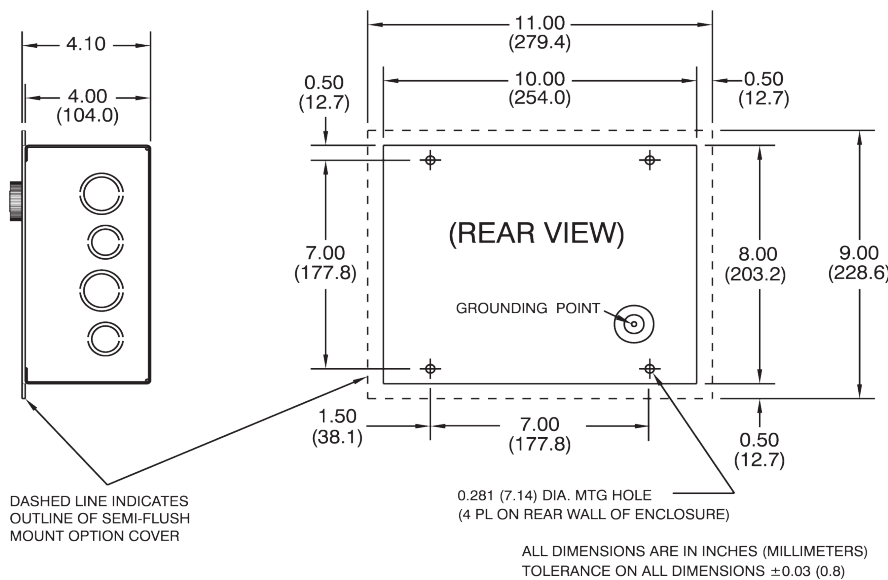


Front Panel LED Indicators

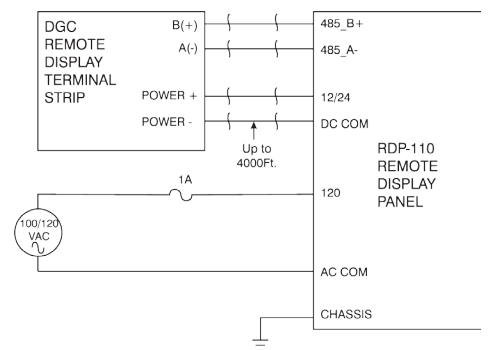
- (A) Green LED illuminates when power is applied to the RDP-110
- (B) Green LED Turns ON when the generator is supplying more than two percent of rated current
- (C) Pre-Alarm Conditions (Yellow LEDs)
- (D) Pushbuttons
 - ▶ Lamp Test Pushbutton exercises the audible alarm and tests all LEDs
 - ▶ Alarm Silence Pushbutton silences the audible alarm
- (E) Alarm Conditions (Red LEDs)
- (F) Red LED illuminates when the DGC is not in AUTO
- (G) Audible alarm annunciates when DGC is not in AUTO and when alarms and pre-alarms occur
- (H) Dashboard line indicates the front panel outside edges when semi-flush mounted



Outline Diagram: Rear and Side Views



Wiring Diagram



Please consult Blue Star electrical drawings for verification.