

## Sentry-GenPro

**Sentry-GenPro Battery Monitor** is designed to monitor and evaluate the state of health for generator starting batteries. This reliable monitor is intended to be installed inside the container with high operating temperature and excessive vibration.

| Sentry-GenPro-12V  |                     | Sentry-GenPro-24V (Default) |                      |
|--------------------|---------------------|-----------------------------|----------------------|
| 1 string of 2 x 6V | 2 strings of 2 x 6V | 1 string of 2 x 12V         | 2 strings of 2 x 12V |

- Reliable internal resistance measurement for individual batteries including connection resistance, to identify loose or corroded connections.
- Evaluate available CCA (Cranking Current). Generate alarm when lower than setting
- Record and analyze cranking event/exercise. Data can be viewed with HMI display or remotely
- Intelligent algorithm detects thermal runaway risk at its earliest stage
- Temperature monitoring for ambient and each battery string

- □ Current monitoring from the connection cable, without a transducer, up to 1,000A
- String and battery voltage monitoring to warn insufficient charge condition
- Risk alarms/dry contacts for urgent and service alarms
- Battery bank powered from 9 to 30V
- Plug and play HMI for technician visits
- Modbus-RTU for integration with SCADA or building management
- Easy connection to Sentry battery monitoring system for data access from web page or Modbus-TCP









# **Sentry-GenPro**

### **Specifications**

| Specifications                  |   |  |  |
|---------------------------------|---|--|--|
|                                 | Power Supply  |  |  |
| Power Input                     | Internal DC/DC converter, 9 – 30V input; Consumption: 2W  |  |  |
| Current/Temperature Measurement |   |  |  |
| Current Sensing                 | +/- 1,000A. Using connection cable as shunt. No need for a CT.  |  |  |
| Temperature Sensing             | 1 ambient, 2 pilot sensors. Intelligent thermal runaway detection algorithm   |  |  |
| Temperature Range               | Measurement range: -40 to 100°C<br>Operating range: -40°C to <b>85°C</b> (-40°F to <b>185°F</b> )   |  |  |
|                                 | Voltage Measurement   |  |  |
| Battery Configuration           | 12V or 24V flooded/vented/AGM, VRLA or NiCad 1 string of 2x6V or 2x12V; 2 strings or 2x6V or 2x12V [Unit cannot work with single 12V system because the charger in parallel will interfere with measurements. Please replace single 12V with 2x6V batteries.] |  |  |
|                                 | Communication   |  |  |
| Serial Port                     | RS-485 (recommended) and RS232C<br>9600, 8, 1, N (No Parity, No Flow Control)<br>Modbus-RTU for integration with building management system   |  |  |
|                                 | Indication and Output   |  |  |
| LED Indication                  | Dual-color (RED/GREEN) LED for status and alarm   |  |  |
| Audible Alarm                   | Beeping when alarm condition exists.  |  |  |
| Alarm/Control Output            | Alarm-1: Normal Close, 0.1A capacity, URGENT alarm  Estimated Cranking Current Low  Charger Voltage High/Low Battery Voltage High/Low Temperature High  Alarm-2: Normal Close, 0.1A capacity, SERVICE alarm Internal Resistance High Temperature Low          |  |  |
|                                 | Dimensions  |  |  |
| Unit Dimensions                 | 140mm(W) x 50mm(H) x 190mm(D)   |  |  |
| Mounting                        | Heavy duty DIN rail mount   |  |  |
|                                 |   |  |  |

\*Specifications subject to change without notice

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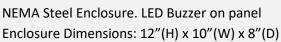


#### **Ordering Information**

Example: Sentry-GenPro-24- SB32-HMI-2S6F

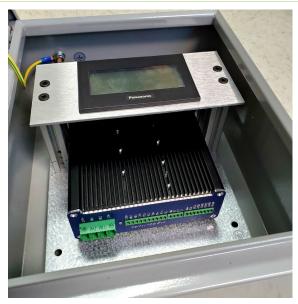
| Item            | Part Number                          | Notes  |
|-----------------|--------------------------------------|--|
| Monitoring Unit | Sentry-GenPro-24<br>Sentry-GenPro-12 | 24V version (Default) for 1 or 2 strings of 2x12V<br>12V version for 1 or 2 strings of 2x6V                              |
| Enclosure       | -SB32                                | SB32 steel enclosure, with 4x vibration-damping sandwich mounts  |
| нмі             | -HMI                                 | HMI-GT02-GEN   |
| Harness         | -2S6F                                | Default: 6FT, 2 strings  Length and lug size shall be provided to match Genset, battery posts and installation location. |





2D/3D CAD files:

https://www.polycase.com/sb-32



DIN mounting on base panel.

HMI inside enclosure

Accomendation for other parts such as Moxa modules.

In order to make a perfect fit to your Genset/container for streamlined installation, please discuss with us for logistical details.

Call or Email: tech@batterydaq.com

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#### **Installation Photos**



Caterpillar generator in container



Sentry-GenPro

**Cummins** generator









1 or 2 strings of 2x12V Harness to Ground, 24V bolts on starter Vibration-dumping mounts



HMI inside steel enclosure.
(Moxa Ethernet and Modbus to collect data from GenPro and Genset controller)

More photos online <a href="https://www.batterydag.com/sentry-genpro">https://www.batterydag.com/sentry-genpro</a>

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