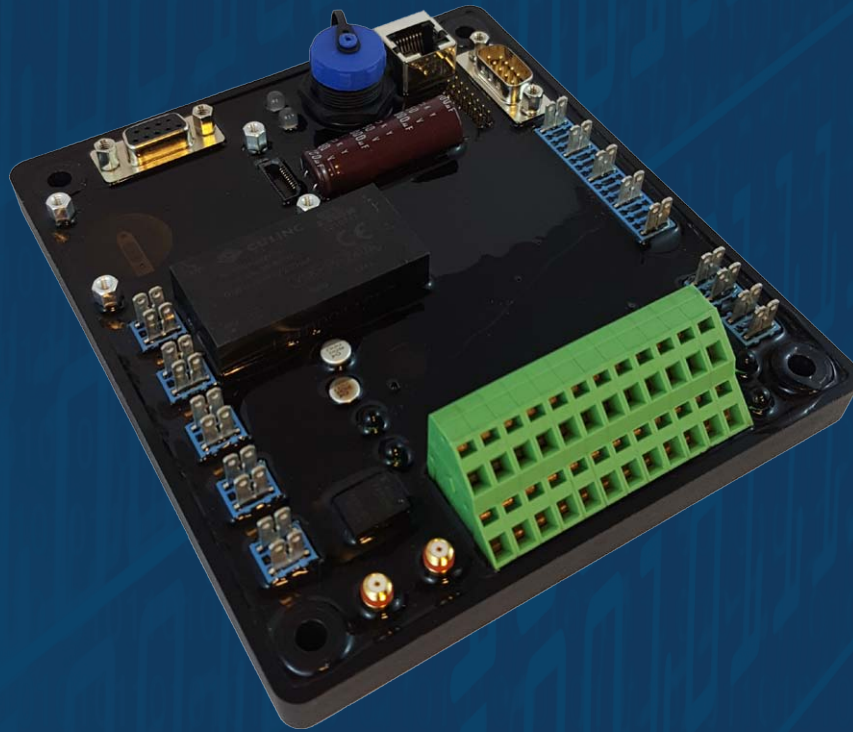


# POWER GENERATION MONITOR

IOT-GEN

Acquire, analyze, and monitor 3-phase power generation

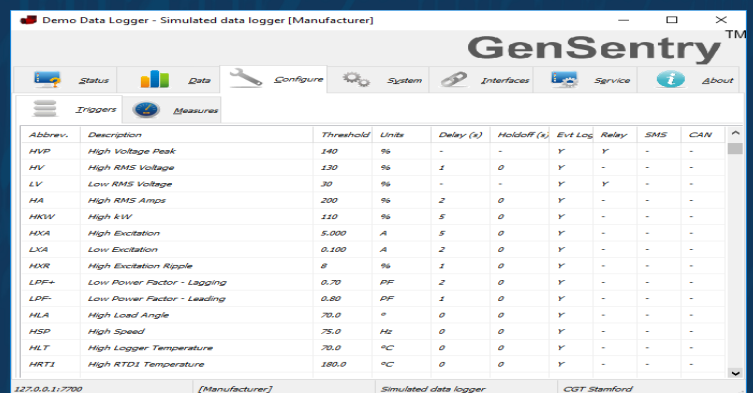
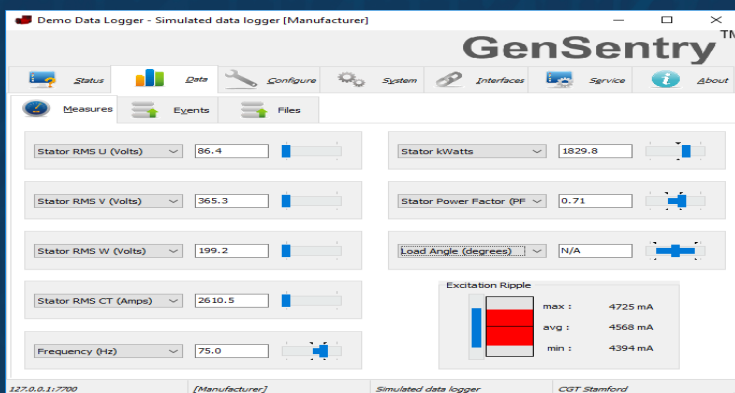


## Features

- Stator AC Waveform Monitoring
- Cycle-by-Cycle RMS
- High-Voltage Transient (HVT) Detection & Capture
- 10/100BASE-T, USB, or optional RF Modem Communications
- Event Recording
- IoT Connectivity

## Applications

- 3-phase Power Generation Monitoring
- Low-Voltage-Ride-Through (LVRT) Compliance
- Warranty Validation
- Insurance Validation



# POWER GENERATION MONITOR

IOT-GEN

Acquire, analyze, and monitor 3-phase power generation

## Technical Specifications

### Input

#### PMG/Aux (1 or 3 phase)

Voltage Range: 50 to 250 V<sub>RMS</sub>  
Frequency Range: 40 to 200 Hz  
Power Burden Max: 3 W

#### Stator (3 x 1 phase)

Voltage Range: 10 to 690 V<sub>RMS</sub>  
Frequency Range: 50 to 60 Hz

#### Stator CT (Secondary)

Current Max: 0.4 / 1.0 / 5.0 A  
Power Burden Max: 0.2 VA

### Power

Sources: Aux, PMG, USB

### Exciter

Voltage Max: 350 V<sub>DC</sub>  
Current Max: 15A continuous (30A peak)

### Temperature

External RTD: 7x 2-wire  
PCB Range: -40 to +100 °C

### Acceleration

Accelerometer: 2x IEPE/ICP  
Voltage Range: ±5.0 V<sub>DC</sub>

### Encoder

Impedance: ∞ / 0 Ω

### Output

#### Opto-Isolated Relay

Isolation: 3000 V  
Voltage Max: 35V  
Current Max: 20 mA

### Interfaces

100/1000BASE-T  
CAN2.0B  
USB2.0  
RS-485  
2G/3G/LTE (Optional Module)

### Protocols

CANopen  
MODBUS  
MQTT  
UDP  
TCP

### Standards

UL 61010-1  
CE  
RoHS

### Recording

Medium: 4GB eMMC  
Logging Trigger: Interval or Event  
Logging Data: Stator V<sub>RMS</sub>  
Stator I<sub>RMS</sub>  
Stator P<sub>RMS</sub>  
Stator Q<sub>RMS</sub>  
Stator S<sub>RMS</sub>  
Excitation  
Temperature  
Acceleration  
Power Factor  
Frequency  
Load Angle  
Single Capture

LVRT Logging Rate: Low V<sub>RMS</sub>  
LVRT Logging Trigger: Stator V<sub>RMS</sub> x3  
LVRT Logging Data: Load Angle  
LVRT Logging Rate: f<sub>GENERATOR</sub>  
LVRT Logging Period: 5 seconds  
HVT Logging Trigger: High V<sub>PEAK</sub>  
HVT Logging Data: Stator Waveform Voltage x3  
Stator Waveform Current x1  
HVT Logging Rate: 1MSPS  
HVT Logging Period: 120ms

### Event Triggers

Aux Input (NC/NO)  
Stator RMS Voltage High/Low  
Stator Peak Voltage High  
Stator RMS Current High  
Stator Power High  
Stator Power Factor Low  
Excitation Current High/Low  
Excitation Loss  
Excitation Ripple Current High  
Load Angle High  
Frequency High  
Temperature High/Low  
Acceleration High

## Ordering Options

### IOT-GEN-MMM

MMM

MODEM

{X: No MODEM, M82kHz, 3G; 2G/3G, LTE: 2G/3G/LTE}