

H3G-TA Battery Monitoring System

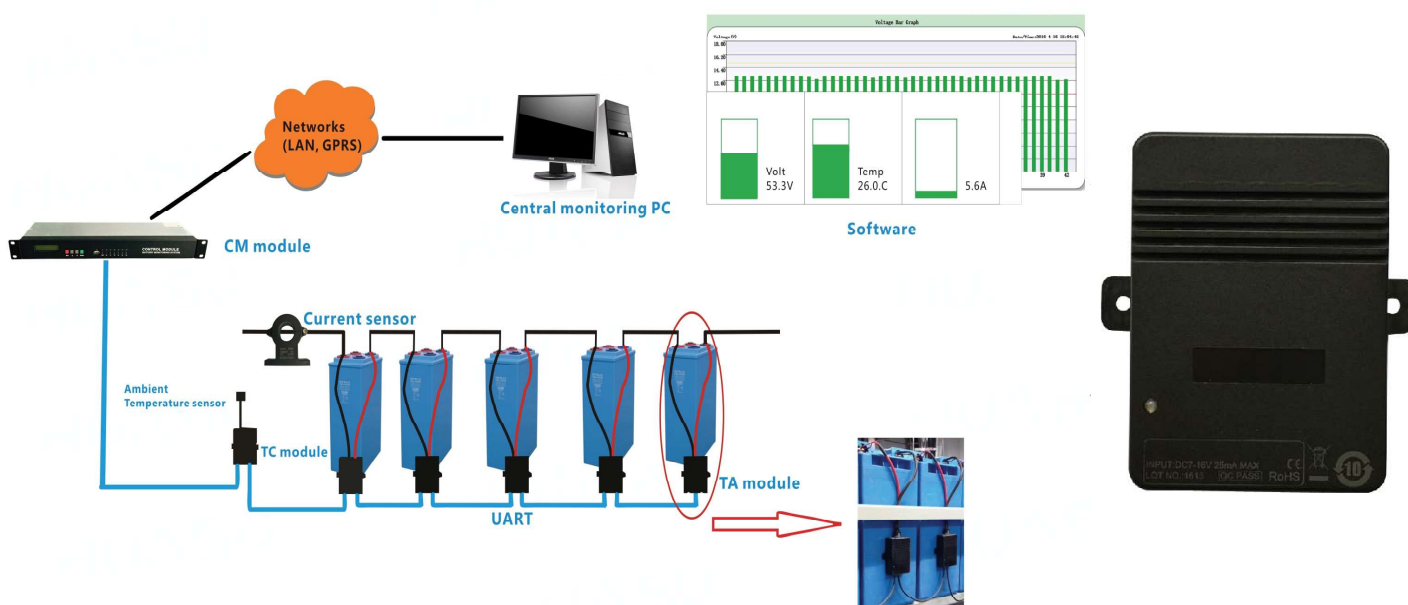
Internal Resistance, Voltage and Temperature Measurements



OVERVIEW

The H3G-TA Battery Monitoring System is designed specifically for single battery monitoring. TA module advanced patented technology provides the most comprehensive stationary battery health analysis in the industry

- Continuous 24/7 online monitoring
- One TA module device per battery to monitor internal resistance, voltage and temperature
- Software is available to retrieve data from TA module
- Serial port with optical isolation, meets Modbus specification
- Interfaces with most UPS controllers
- User-friendly installation



FEATURES

- Full resistance, battery temperature and voltage monitoring for comprehensive battery state of health analysis
- String current and ambient temperature monitoring (requires TC module)
- Automatic analysis of battery monitoring data to, identify the batteries that need replacement or maintenance (requires CM module)
- All operating parameters can be set via the serial bus
- Panel lights indicate when alarm is raised, which can also be read via the serial bus
- Store historical data, including up to 24 battery voltage readings; 720 string voltage readings; 12 internal resistance readings; 15 temperature readings; 100 alarms and 50 events
- PC software is available for management of multiple strings, real-time querying and historical data

SPECIFICATIONS

Environmental

Operating temperature: -5°C~50°C, 5%~90%RH
Storage temperature: -10°C~70°C, 5%~90%RH

Usage

2V, 6V or 12V batteries, capacity less than 2000AH

Power Requirements

TA module: battery-powered, less than
60mA(2V) or 25mA(12V) quiescent
TC module: 8~13VDC, 2W
Converter: 8~13VDC, 0.3W
CM module: 85~264VAC, 100V~370VDC, 15W

Protection

Battery circuit is fused
TA module with reverse polarity protection and optical isolation

Measurement Range & Accuracy

String voltage: 20~800V, $\pm(0.5\%+0.2V)$
Cell voltage: 1.5~2.5V, $\pm(0.1\%+1mV)$
9~15V, $\pm(0.1\%+10mV)$
Internal resistance: 100~99999 $\mu\Omega$
Battery temperature: 5°C~50°C, $\pm 1.5^\circ C$
String current: 0~500A, $\pm 2\%$ (Full scale)

Installation

Mount on battery or DIN rail

Communications Interfaces

TA module: serial port meets Modbus, supports 130 devices on each bus
TC module: serial port meets Modbus
CM module: RS485, Ethernet Port, meets Modbus/RTU, Modbus/TCP and SNMP
Insulation: 2000VAC

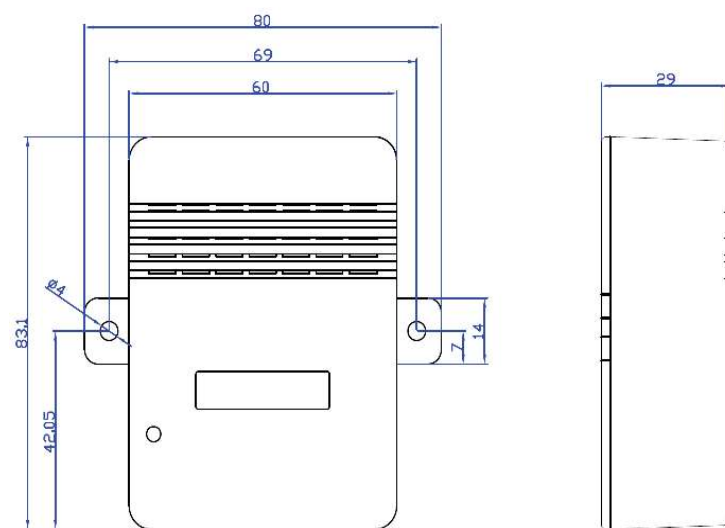
Weight

CELLCHECK: 115g
TC module: 260g
CM module: 1.8Kg

Standards

UL61010-1
CE
Rohs

DIMENSIONS



(Unit: mm)

OPTIONS

1. Converter
Use for applications without CM module and connect directly to third-party controller.
2. Software
PC software available to retrieve and display data from CM module

APPLICATIONS

- UPS
- Telecommunications
- Battery supplied applications
- Utilities
- Fire & Safety systems
- Remote monitoring