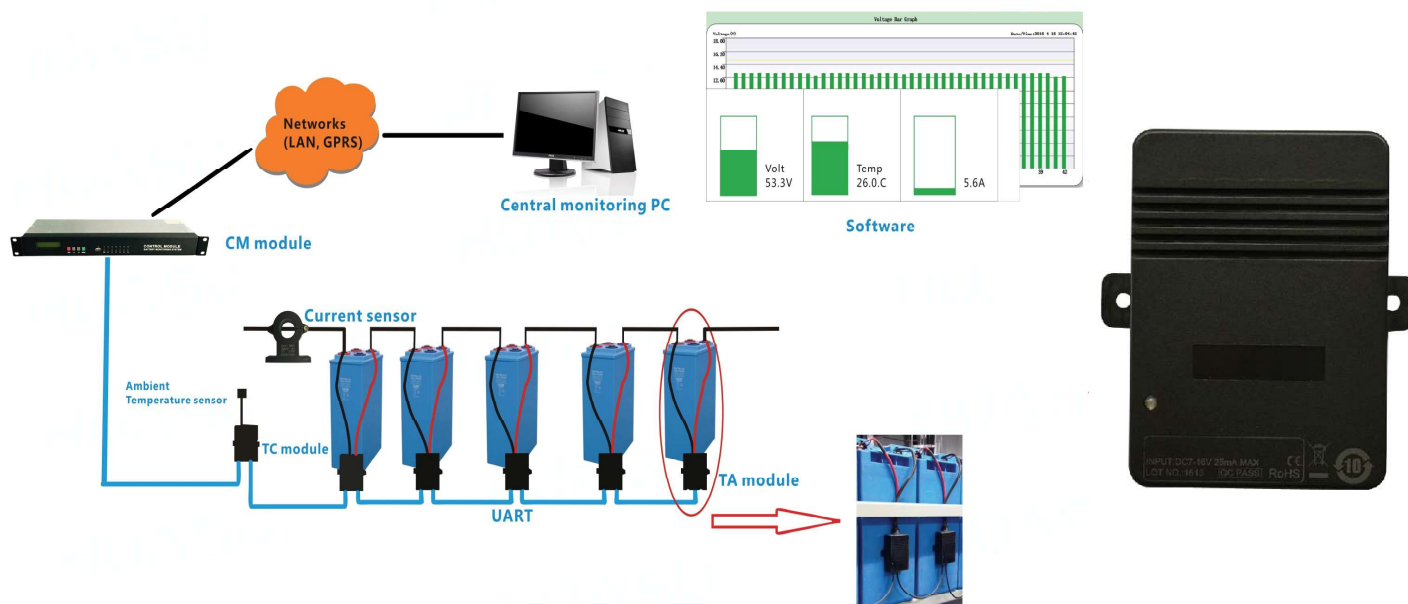YOUR BEST BATTERY ADVISOR

VRT sensor - TA Module

Internal Resistance, Voltage and Temperature Measurements

OVERVIEW

The TA module is designed to integrate into an existing monitoring system. It monitors voltage, internal resistance and temperature for a single battery, uploading the data via its optically isolated serial port. The module can be battery or rail-mounted.

• 24/7 online monitoring
• Monitors internal resistance, voltage and temperature of a single battery
• Serial port with optical isolation, meets Modbus specification, easily accessed via an existing monitoring system
• User-friendly installation
• The TA module has a UART port and requires a converter to convert to RS485 or RS232 to integrate with an existing monitoring system. The optional TC module can monitor string current and ambient temperature.

FEATURES

• Full resistance, battery temperature and voltage monitoring for comprehensive battery state of health analysis

• String current and ambient temperature monitoring (requires TC module)

• All operating parameters can be set via the serial bus

• Meets Modbus specification with a RS485 or RS232 port (requires converter)

• Debug software is available

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

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

Measurement Range & Accuracy
Cell voltage: 1.5~2.5V, ±(0.1%+1mV)
                           9~15V, ±(0.1%+10mV)
Internal resistance: 100~65535uΩ
Battery temperature: 5°C~50°C, ±1.5°C

Installation
Mount on battery or DIN rail

Communications Interfaces
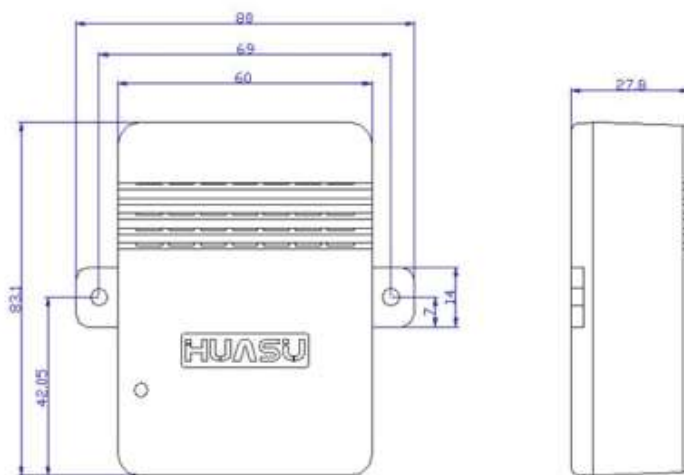TA module: UART port, meets Modbus
Insulation: 2000VAC

Weight
TA module: 115g

Standards
UL61010-1
CE
RoHs

DIMENSIONS

(Unit: mm)

OPTIONS

1. TC module
   Monitors string current and ambient temperature
2. Power supply
   Output: 12VDC
   (for converter and TC module)

APPLICATIONS

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

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