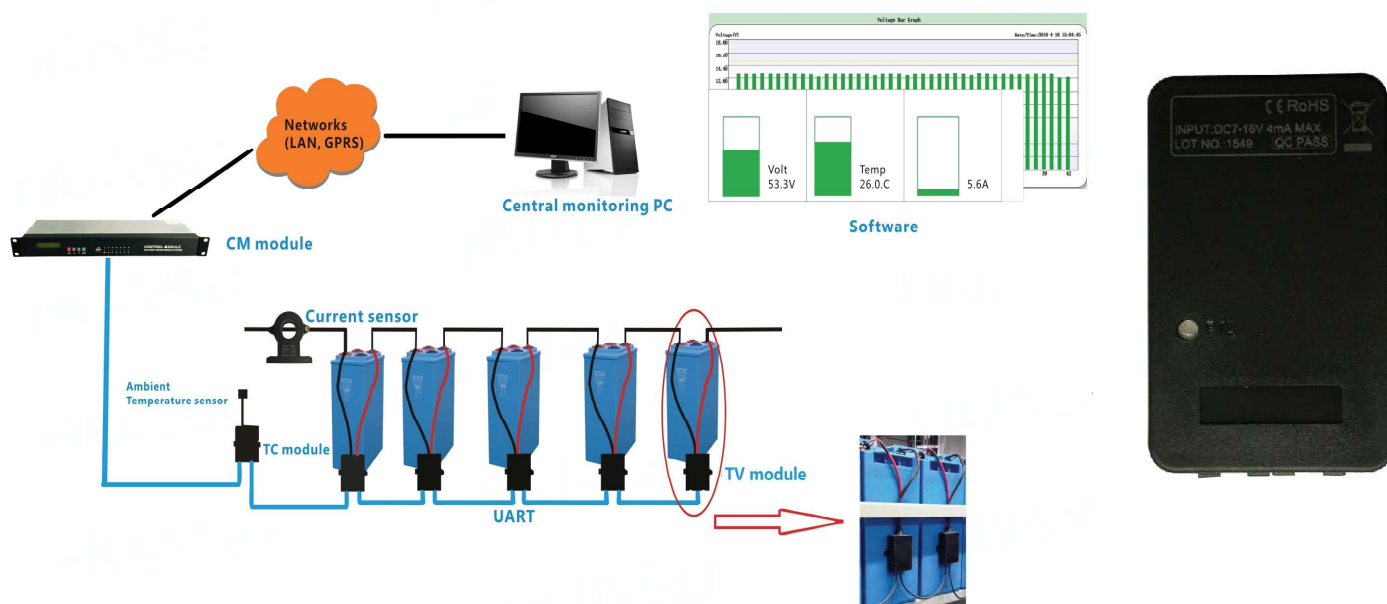# VT sensor-TV Module
Voltage and Temperature Measurements

RoHS CE

OVERVIEW

The TV module is designed for single battery monitoring. TV module advanced patented technology provides the most thorough stationary battery health analysis in the industry. The module can be battery or rail-mounted.

• 24/7 online monitoring
• Monitors voltage and temperature of a single battery
• PC software available to retrieve data from TV module
• Serial port with optical isolation, meets Modbus specification
• User-friendly installation

FEATURES

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

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

• Auto-analysis of battery monitoring data, to identify batteries that need replacement or maintenance (requires CM module)

• Panel lights indicate when alarms are 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

• All operating parameters can be set via serial bus

• PC software is available for management of multiple strings, real-time alarms 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 is less than 3500AH

Power Requirements
TV module: battery-powered,less than 12mA(2V) or 4mA(12V) quiescent

Protection
Battery circuit is fused

Measurement Range & Accuracy
Battery voltage: 1.5~2.6V, ±(0.1%+1mV)
    9~16V, ±(0.1%+10mV)
String current: 0~500A, ±2%(Full scale)
Battery temperature: 5°C~70°C, ±1.5°C

Installation
Mount on battery or DIN rail

Communications Interfaces

TV module: serial port, meets Modbus specification protocol, supports up to 130 devices on each bus
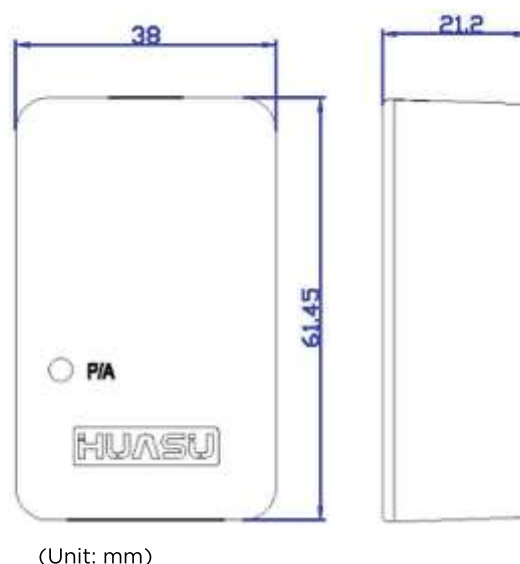Insulation: 2000VAC

Weight
TV module: 50g

Standards
UL61010-1
CE
Rohs

DIMENSIONS

(Unit: mm)

OPTIONS

1. Converter
   Use for applications without the CM module and connect directly to a 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