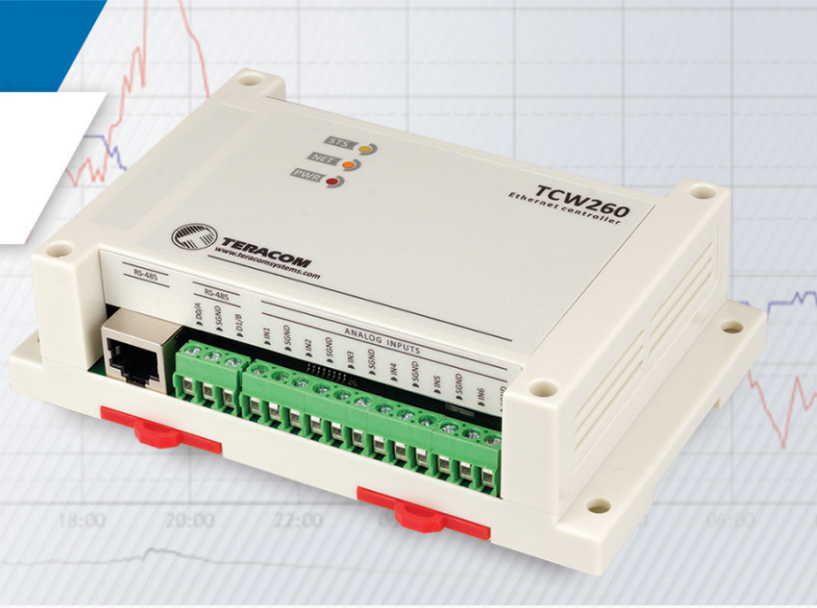
control solutions
TERACOM

TCW260

Energy monitoring module



Overview

TCW260 is an energy monitoring module with an Ethernet interface and data logger functionality.

All its inputs are galvanically isolated from the power supply.

The module has 4 digital inputs, S0 compatible. The digital inputs can work in ON/OFF or counter mode.

There are also 6 analog inputs. Every analog input can work either in voltage (0/10V) or current loop (0/20mA) mode.

The device supports the MODBUS RTU interface for Teracom and third-party sensors.

The used RS-485 interface is fully isolated from the power supply.

Applications

- Energy monitoring and targeting for industry;
- Remote monitoring of renewable energy power plants;
- Protocol conversion - MODBUS RTU to MODBUS TCP;
- Water consumption analysis;
- Gas consumption optimization;
- Energy cost optimization systems;
- Energy consumption management systems;
- A building management system;
- Industrial processes monitoring;
- General SCADA systems.

Interfaces

100 Mbit Ethernet

4x Digital Isolated Inputs

0/10V 0/20mA

6x Analog Isolated Inputs

MB RTU

Isolated MB RTU

Basic features

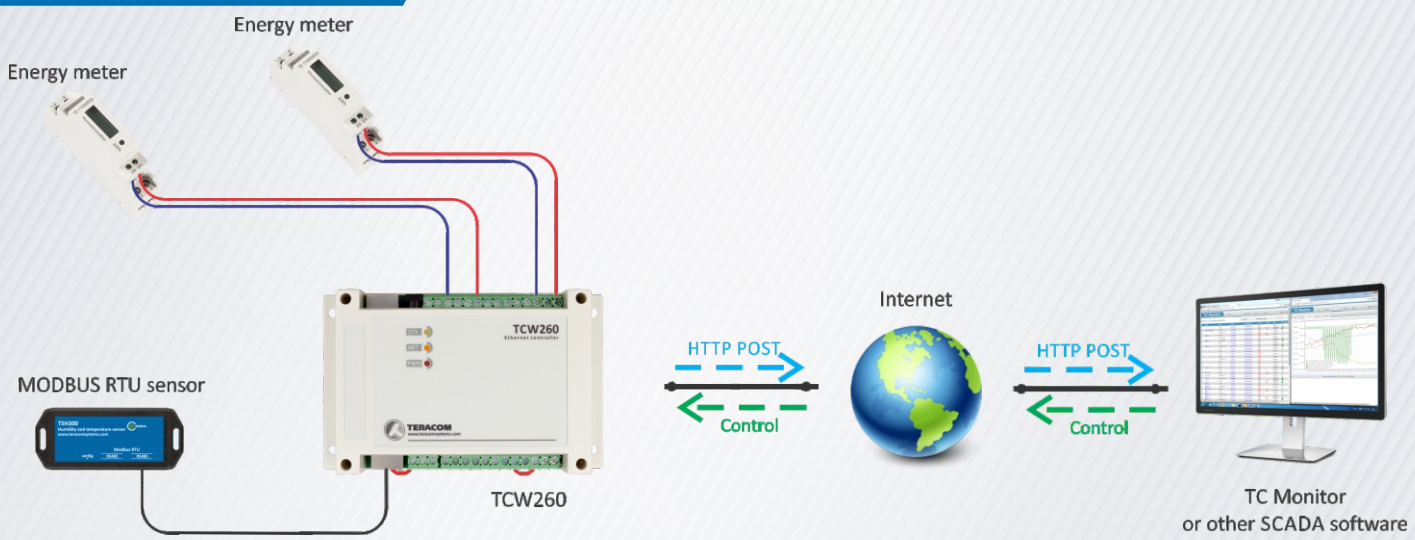
- Up to 24 channels for voltage/current or energy monitoring;
- Up to 24 categorized alarms with flexible setup;
- Graphs for monitored channels/alarms directly on the browser;
- 4 isolated digital inputs with S0 interface (EN62053-31);
- ON/OFF and counter modes for the digital inputs;
- 6 isolated analog inputs with 0/20mA or 0/10V modes;
- RS-485 isolated interface for up to 24 MODBUS RTU registers;
- Periodical HTTP Post with XML/JSON files;
- Data logger for 70000 records;
- NTP support
- HTTP API commands;
- SNMP v.2 and v.3 support;
- Dynamic DNS support ;
- Backup/Restore for device settings multiplications.

TCW260 Energy monitoring module

Short specification

Supply voltage, VDC	10 - 28
Maximum current (without RS-485 powering), mA	220 @ 12 VDC
Weight, g	200
Dimensions, mm	145 x 90 x 40
Operating temperature range, °C	-20 to +55
Operating relative humidity range, %RH	10 to 80 (non-condensing)
Isolation functional, VDC	1000
Maximum voltage applied to a digital input, V	+5
Maximum drop voltage between S0+ and S0-, V	1
Maximum frequency for digital input in counter mode, Hz	10
Analog inputs voltage range	0/10V
Analog inputs current loop ranges	0/20mA
Analog inputs accuracy, %	± 1

Typical application



Supported sensors and detectors

- Energy meter
- Gas/water meter
- AC/DC current
- AC/DC Voltage
- Temperature
- Humidity

Software

- Third party SNMP software applications
- Third party HTTP API software applications