

TCW241 Ethernet I/O module



Overview

TCW241 is an Ethernet I/O module. It provides four digital "dry contact" inputs and four analog 0-60V inputs, with 10bit resolution. The controller supports up to 8 TERACOM 1-Wire sensors for temperature, humidity, carbon dioxide, 0/20mA, AC/DC current, etc.

The Ethernet I/O module has 4 relays with normally open and normally closed contacts.

TCW241has real-time clock (RTC) with time server synchronization (NTP) for advanced relay schedule.

The relays of Ethernet I/O module can be activated either remotely or locally. So-called remote activation includes WEB interface or M2M protocols - MODBUS TCP/IP, SNMP, and HTTP API.

The local activation is possible from schedule, status of a single parameter or by custom made functions. The custom made functions can include up to four parameters.

Applications

- Server room monitoring The device can monitor AC power supply, smoke concentration, door opening, battery voltage, room temperature, and control the cooling system.
- **M2M** systems The device can send periodically information to a dedicated server and execute its commands.
- Scheduled control The device can be used for one-time or repetitive (weekly) tasks to turn on/off relays at previous set times.
- **Environmental monitoring** The device can monitor temperature, humidity, barometric pressure, CO₂ etc.
- HVAC systems with 4 relays, schedule, and custom made functions the device is the right choice for climate control.

Interfaces











Digital Inputs Analog Inputs

Relay Outputs

Basic features

- WEB server for simple configuration and control;
- Multiplier and offset for analog inputs and some sensors;
- MODBUS TCP/IP support;
- SNMP v2 support with trap alerts;
- SMTP with SSL/TLS for e-mail alerts;

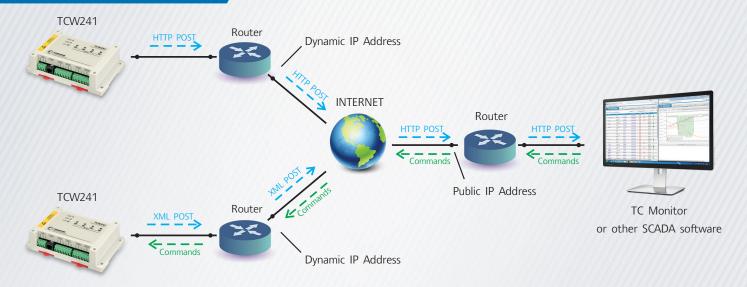
- HTTP Post service with API commands;
- XML/JSON status report files;
- Dynamic DNS support;
- Scheduled control;
- Custom functions.

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Short specification

Supply voltage, VDC	10 - 32
Maximum current (with all relays ON), mA	350 @ 12VDC
Weight, g	230
Dimensions, mm	145 x 90 x 40
Operating temperature range, °C	-20 to +55
Operating relative humidity range, %RH	5 to 85 (non-condensing)
Supply voltage for 1-Wire bus (VDD), VDC	5.0 ± 0.3
Maximum output current for 1-Wire bus (VDD), A	0.2
Analog inputs range, VDC	0 to 60
Analog inputs resolution, VDC	0.01
Analog inputs accuracy, %	± 1
Maximum switchable relay current, A	2
Maximum switchable relay voltage, VAC/VDC	42/60

Typical application



Supported sensors and detectors









AC/I





Software

- TC Monitor
- TCW Control for Android
- TCW Control for iOS
- Third party software applications