

# 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 10-bit 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**











4x
Digital Inputs

4x Analog Inputs

4x Relay Outputs

1-Wire Sensors

### **Basic features**

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

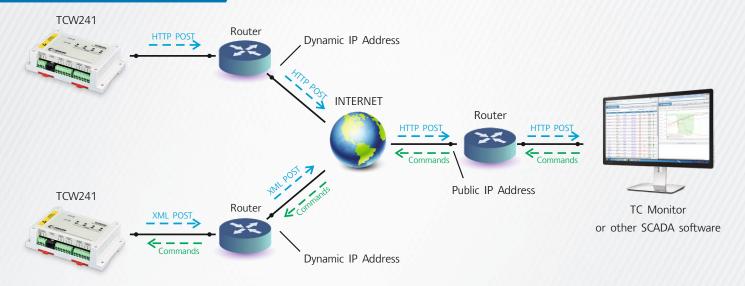
- HTTP Post service with API commands;
- XML/JSON status report files;
- NTP protocol support for time synchronization;
- Scheduled control;
- Custom functions.

# TCW241 - Ethernet I/O module

# **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, °C	-20 to +55
Maximum humidity, %RH	70
Supply voltage for 1-Wire bus (VDD), VDC	$5.0 \pm 0.3$
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	3
Maximum switchable relay voltage, VAC/VDC	42/60

# **Typical application**



# Supported sensors and detectors









CO<sub>2</sub>





### **Software**

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