Overview

TCW122B-CM is a remote IO module for environmental monitoring and control. It has 2 digital, 2 analog inputs and 1-Wire interface for up to 2 temperature/humidity sensors.

The controller has 2 relays with normally open and normally closed contacts. The relays can be activated either remotely or locally. The remote activation includes WEB interface or M2M protocols – SNMP and HTTP API. The local activation is possible from a status of monitored parameter (temperature, humidity, analog voltage and dry contact). Only one parameter can manage the relay at the same time.

For every monitored parameter e-mail and/or SNMP trap can be sent as an alert for previous set alarm conditions.

Applications

- **Remote environmental monitoring** – The device can monitor temperature and humidity in server rooms, data centers, mobile operators facilities room, offices etc.
- **Remote control of electric devices** - With its 2 relays, the device can control independently 2 electric devices. This can be done either by command through the embedded WEB server or by some dedicated application, for example, TCW Control.
- **Home and office alarm systems** – The device can be set up to send e-mail and SNMP traps alerts in case of an alarm condition for temperature/humidity and digital/analog inputs.
- **SCADA systems** - With its supported M2M protocols, the device can be easily integrated into supervisory control and data acquisition systems.

Interfaces

- 10 Mbit Ethernet
- 2x Digital Inputs
- 2x Analog Inputs
- 2x Relay Outputs
- 2x 1-Wire Sensors

Basic features

- Embedded WEB server for configuration and control;
- „Dry contact“ and „Logic level“ modes for digital inputs;
- SNMP v1 support;
- SNMP traps for alarm conditions;
- SMTP without SSL/TLS support;
- Emails on alarm conditions;
- HTTP API commands support;
- XML status report file;
- HTTP and SNMP port changing;
- Remote firmware update.
Short specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage, VDC</td>
<td>12 ± 2</td>
</tr>
<tr>
<td>Maximum current (with both relays ON), mA</td>
<td>200</td>
</tr>
<tr>
<td>Weight, g</td>
<td>110</td>
</tr>
<tr>
<td>Dimensions, mm</td>
<td>107 x 72 x 32</td>
</tr>
<tr>
<td>Operating temperature range, °C</td>
<td>-20 to 55</td>
</tr>
<tr>
<td>Operating relative humidity range, %RH</td>
<td>5 to 85 (non-condensing)</td>
</tr>
<tr>
<td>Minimum high-level input voltage for digital inputs, VDC</td>
<td>+ 2.5</td>
</tr>
<tr>
<td>Maximum low-level input voltage for digital inputs, VDC</td>
<td>+ 0.8</td>
</tr>
<tr>
<td>Maximum input voltage for digital inputs, VDC</td>
<td>+ 5.5</td>
</tr>
<tr>
<td>Supply voltage for the 1-wire bus (VDD), VDC</td>
<td>5.3 ± 0.2</td>
</tr>
<tr>
<td>Maximum output current for the 1-wire bus (VDD), A</td>
<td>0.2</td>
</tr>
<tr>
<td>Analog inputs range, VDC</td>
<td>0 to 60</td>
</tr>
<tr>
<td>Maximum switchable current for relay contacts, A</td>
<td>3</td>
</tr>
<tr>
<td>Maximum switchable voltage for relay contacts, VAC/VDC</td>
<td>30/24</td>
</tr>
</tbody>
</table>

Typical application

![Diagram showing mobile device connecting to TCW122B-CM via internet and a router](image)

Supported sensors and detectors

- Temperature
- Humidity
- Smoke Detectors
- Door and Window Sensors
- AC Voltage Detector
- Other Sensors with Relay Output

Software

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