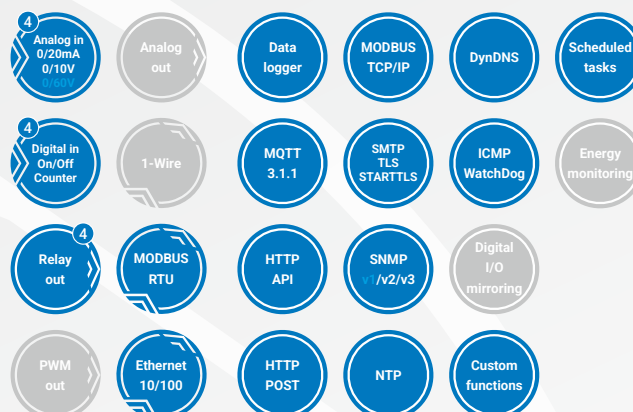


TCW242 Industrial IoT module



Overview

TCW242 is a member of Teracom's High-end product line, developed for demanding industrial IoT applications. It combines Ethernet connectivity, flexible I/O options, and a secure web-based interface for real-time monitoring and control. With support for SNMP, HTTP API, MQTT, and MODBUS TCP/IP protocols, TCW242 integrates easily with SCADA systems and cloud platforms.

Its robust design and versatile functionality make it suitable for remote equipment management, process automation, and data logging across a wide range of industrial environments.

The device supports up to 24 user-defined alarms with five trigger states, as well as logic rules and scheduling, enabling autonomous operation based on predefined conditions. Thanks to its DIN-rail mountable enclosure and wide temperature range, TCW242 is ideal for installation in control panels and harsh field locations.

Features

- Provides web-based configuration with password protection.
- Provides Ethernet connectivity at 10/100 Mbps with automatic cable detection.
- Monitors up to 24 input and sensor channels.
- Supports up to 24 independent alarm conditions.
- Supports SNMP v2 and v3 protocols; enables SNMP traps.
- Supports scheduled relay output control.
- Supports custom logical functions.
- Enables secure email transmission via TLS 1.0, TLS 1.1, and TLS 1.2 support.
- Provides HTTP API for remote integration and control.
- Supports Dynamic DNS services.
- Enables backup and restore for quick device configuration replication.
- Sends periodic HTTP/HTTPS POST requests with XML/JSON status data.
- Supports MODBUS TCP/IP protocol.
- Supports MQTT 3.1.1 protocol.
- Allows firmware updates via a standard web browser.
- Features a rugged DIN-rail or wall-mountable enclosure.

Key Specifications

- Power Supply: 10-28 VDC, 0.35 A @ 12 VDC.
- Operating Temperature range: -20 to +55 °C.
- Operating Humidity range: 10 to 80 %RH (non-condensing).
- Dimensions: 145 x 90 x 40 mm.
- Weight: 200 g.
- Enclosure: DIN rail mountable.
- Warranty: 3 years.
- Digital Inputs: 4 dry contact, non-isolated, max 5.5 VDC.
- Analog Inputs: 4 single-ended, non-isolated, 0-10 V or 0-20 mA, 12-bit resolution, ±1% accuracy.
- Relay Outputs: 4 SPDT (NO/NC), rated 3 A @ 24 VDC/30 VAC.
- RS-485 Interface: Non-isolated, supports up to 24 Modbus RTU registers.
- Data Logging: Up to 70000 records.

Applications

- Remote monitoring of wind turbines and renewable energy systems.
- Electrical parameter monitoring in industrial systems using AWS IoT or equivalent cloud platforms.
- Alarm and status reporting for production or utility assets.
- Process control and logging in remote automation infrastructure.

Compatible Sensors

- Precision temperature sensor [TST300](#).
- MODBUS RTU relay output module [TD0340](#).
- Humidity and temperature sensor [TSH300](#).
- CO₂ and pressure sensor [TSM400-4-CP](#).
- MODBUS RTU S0 pulse counter [TDI340](#).
- AC voltage detector [TSV101](#).

www.teracomsystems.com/ethernet/industrial-iot-module-tcw242

