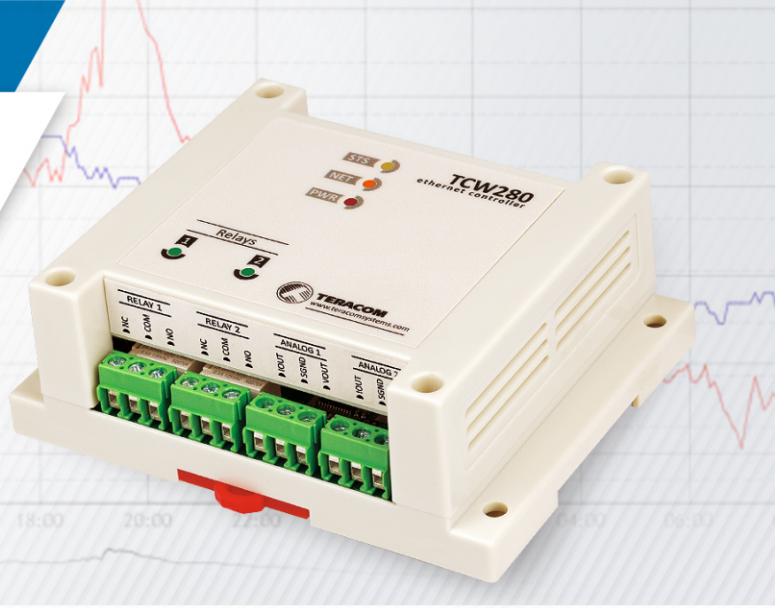
control solutions
TERACOM

TCW280
Analog output module



Overview

TCW280 is an analog output module with an Ethernet interface and galvanic isolation between power supply and outputs.
It has 2 analog output channels. Every channel can work either in voltage (0/5 or 0/10V) or current loop (0/20, 4/20 or 0/24mA) mode. Generated signals have excellent stability and 12-bit resolution.
The device has also 4 digital (open-drain) outputs. The digital outputs work in two modes ON/OFF or PWM. In ON/OFF mode they can be used as a standard digital output to control devices with dry contact activation. In the PWM mode, the output can be used as an “analog” output for appropriate processes.
TCW280 has also 2 relays with normally closed and normally open contacts. Both relays can be activated from the WEB interface, M2M protocol or by the schedule.
The module supports MODBUS TCP/IP, SNMP, and HTTP API for M2M communication.

Applications

- Direct electronic valve actuators control;
- DC motor speed control;
- Direct dimming of RGB LED's;
- Variable frequency drive control;
- Solenoid valve control;
- Solid state relay control;
- Remote transmission (tunneling) of analog signals.

Interfaces

100 Mbit Ethernet

2x Digital Outputs ON/OFF or PWM

2x Analog Outputs Voltage or Current

2x Relay Outputs

Basic features

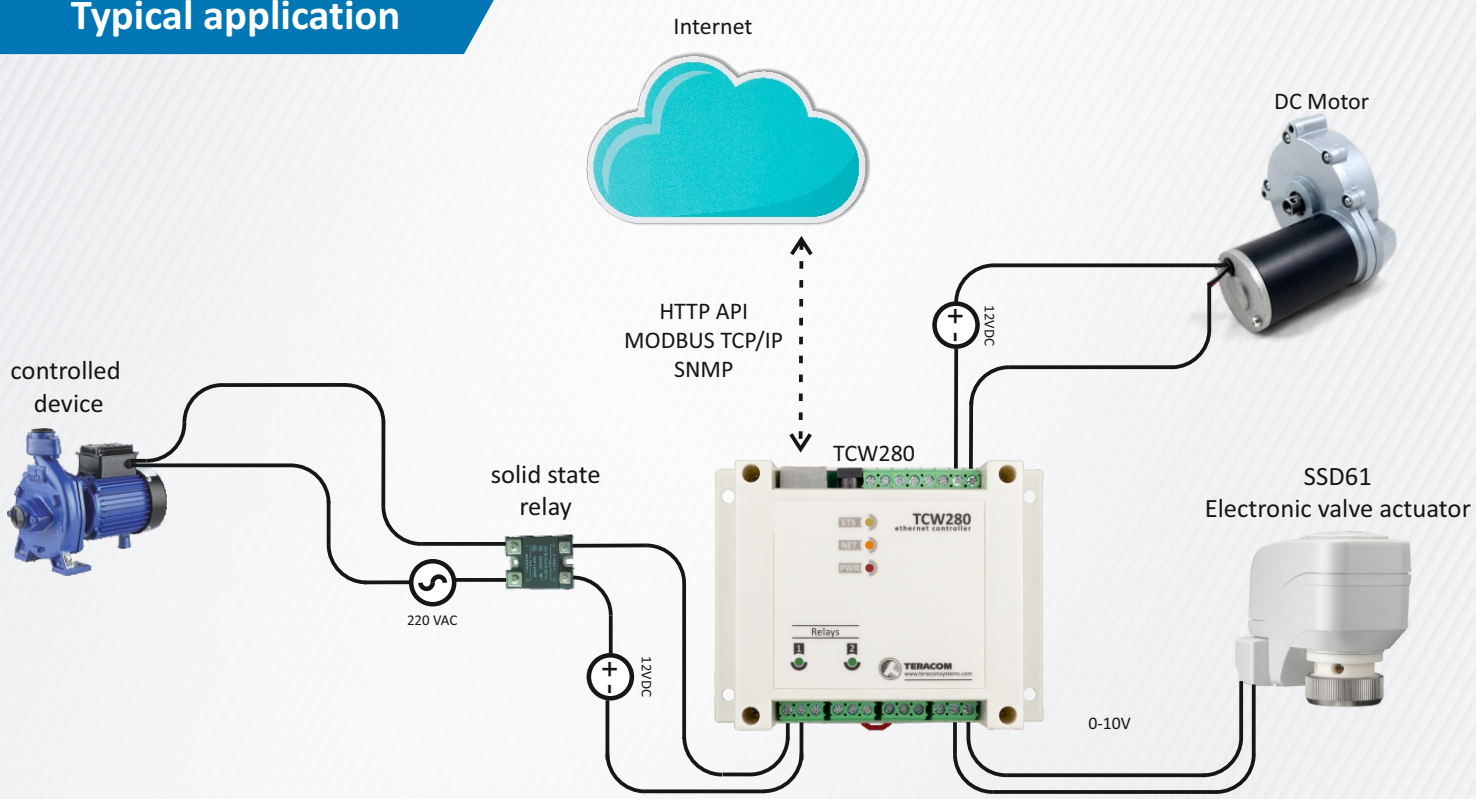
- Galvanically isolated outputs;
- SNMP v2 support;
- MODBUS TCP/IP support;
- Periodical HTTP post with XML/JSON status file;
- HTTP API commands in server and client mode;
- 4 schedules with single and weekly mode;
- Dynamic DNS support;
- DIN-Rail/wall-mountable enclosure;
- Back-up/Restore of configurations;
- Remote firmware update.

TCW280 - Analog output module

Short specification

Supply voltage, VDC	10 - 28
Maximum current (with all relays ON), mA	220@12VDC
Weight, g	170
Dimensions, mm	115 x 90 x 40
Operating temperature range, °C	-10 to +55
Operating relative humidity range, %RH	10 to 80 (non-condensing)
Analog output voltage ranges, VDC	0/5V or 0/10V
Analog output current loop ranges, mA	0/20, 4/20mA or 0/24mA
Analog outputs accuracy, %	± 1
Open drain output maximum voltage, VDC	24
Open drain output maximum current, A	0.3
Open drain output in PWM mode - frequency, Hz	1, 5, 10, 50, 100, 500, 1000, and 2000
Maximum switchable relay current, A	0.5
Maximum switchable relay voltage, VAC/VDC	30/24
Isolation between power supply and outputs, V	1000

Typical application



Software

- Third party SNMP managers;
- Third party MODBUS TCP/IP software;
- Third party HTTP XML/JSON applications.