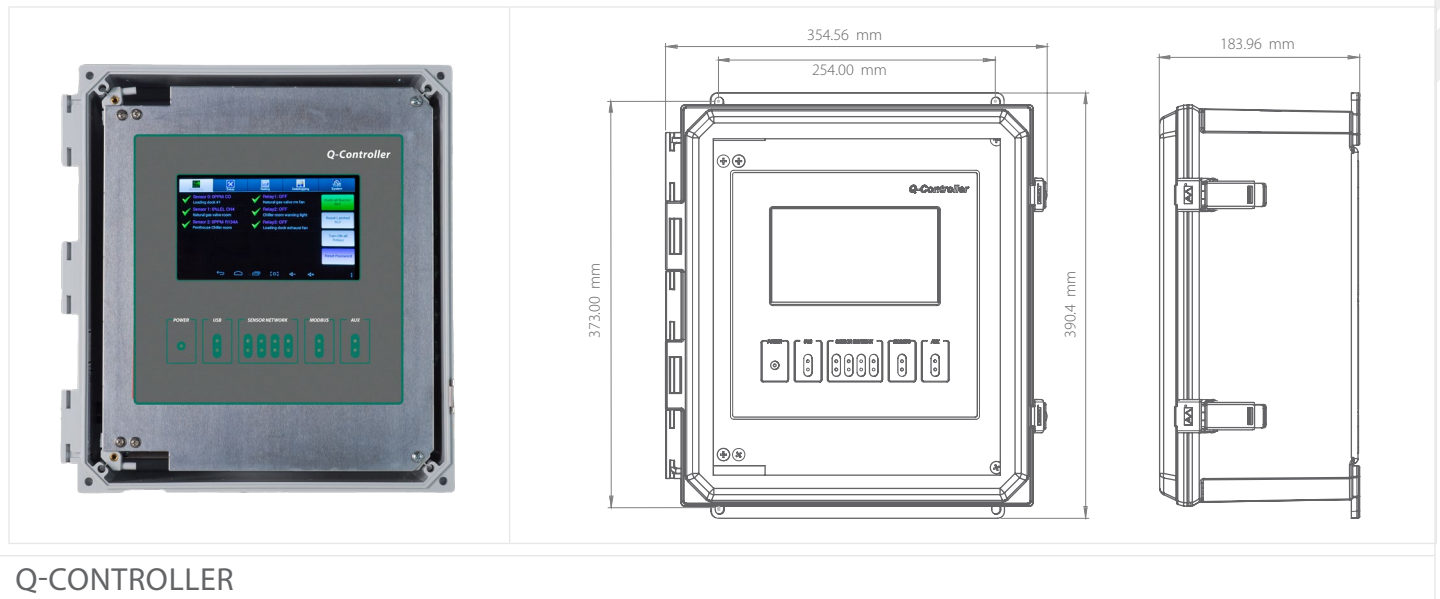


## GAS CONTROLLER SERIES UL2017 APPROVAL



Q-CONTROLLER

### PRODUCT DESCRIPTION

The new Q-Controller is a highly advanced gas detection system with unique features. It supports **128 channels** via RS-485 communication, **128 analog** inputs and outputs, and **128 binary** inputs and outputs. Key features include:

- **Modbus and BACnet IP outputs** for integration.
- **Wireless communication** for programming and data download via smartphones or tablets.
- **Touch screen graphic display** for easy programming and data viewing.
- **Scheduler** for relay activation/deactivation based on time and day.
- **Auto-configure program** to detect connected devices.
- **Compatibility with any 4-20 mA signal** for additional monitoring (e.g., temperature, humidity).
- **Centralized system connectivity** to monitor gas concentrations across a facility.
- **Optional remote monitors** for pre-entry gas concentration checks.

This controller is ideal for comprehensive and flexible gas detection and monitoring.

### SPECIFICATIONS

VOLTAGE	24 VDC nominal, range 18 to 30 VDC 24 VAC nominal, range 15 to 24 VAC 50/60 HZ
CURRENT	Q Controller: Max. 0.75 A (fuse protected) Strobe and Horn: Max. 0.75 A (fuse protected)
FUSE	1 Amp, 2 x 750mA Polyswitch
CABLE SPECIFICATION	<ul style="list-style-type: none"> <li>• Power - Twisted shielded pair Communication (RS-485)</li> <li>• Communication - Belden 9841 or equivalent twisted shielded pair, 120 ohm</li> </ul>
POWER SUPPLY OUTPUT	24V supplied externally through controller
INPUT TYPES	128 inputs on 4-20mA using AI-BOX module (up to 16 modules) 4 channel switch inputs or binary inputs (BI-1 and BI-2)
OUTPUT TYPES	<ul style="list-style-type: none"> <li>• 128 outputs on 4-20mA using AO-BOX module (up to 16 modules)</li> </ul>



## SPECIFICATIONS

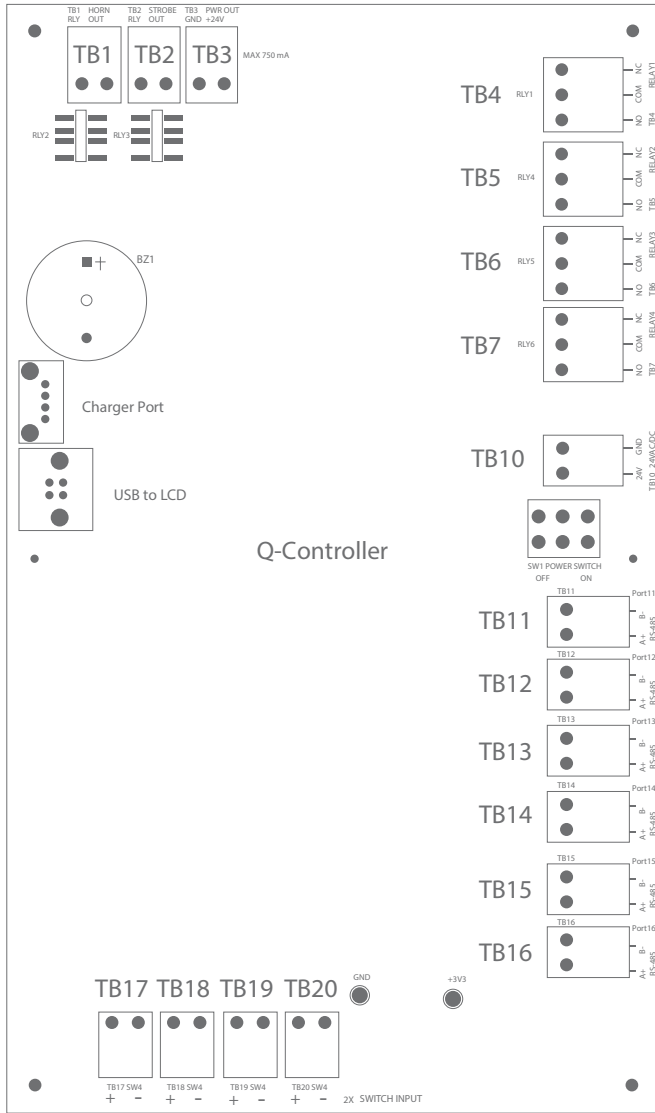
RELAYS	4 onboard SPDT rated 10 Amps resistive 7.5 Amps inductive at 240VAC/30VDC Remote 128 inputs using BI-BOX module (up to 31 modules) Remote 128 outputs using BO-BOX module (up to 31 modules)
RELAYS ACTIVATION	Actuation / De-Actuation: 0 to 9999 seconds Default is 10s
DISPLAY	7-inch LCD touchscreen display 800 X 480 resolution and capacitive multi-touch TN panel for easy screen navigation
PANEL INDICATOR	15 Status LEDs Power Status 4 x RS-485 port TX/RX Status for Sensor Network 1 x RS-485 port TX/RX Status for Modbus 1 x RS-485 port TX/RX Status for BACnet module BAC-Box
BUZZER	100 DB at 10 cm, 3700 Hz
HORN AND STROBE	Two relay dry contact 24VDC (750mA Max)
DATABUS COMMUNICATION	Modbus RTU and BACnet Optional
TEMPERATURE SPECIFICATION	Storage: 32°F to 68°F (0°C to 20°C) Operating: -4°F to 122°F (-20°C to 50°C)
HUMIDITY SPECIFICATION	Continuous 5 to 95% RH, non-condensing Intermittent 0 to 95% RH, non-condensing
ENCLOSURE	NEMA Type 1, 2, 3, 4, 4X, 12 and 13 IEC 60529, IP66 Flammability V-0 per UL 94 UL94V-V-0
ENCLOSURE MATERIAL	Epoxy carbonate
DIMENSIONS	16" x 12" x 6" (406 x 305 x 152 mm)
WEIGHT	12.0 lbs (5443g)
APPROVALS	Standard UL2017

*Ensure a complete understanding of all applicable Federal, State, Provincial and Local Health and Safety laws and regulations before using these products.*

## ACCESSORIES

Q-DISPLAY-A	Q-Display 7-inch Remote LCD Display for Q-Controller
AI-BOX-0	AI-BOX 8 Channel Analog Input Module (Max 16 Modules) for Q-Controller
AO-BOX-0	AO-BOX 8 Channel Analog Output Module (Max 16 Modules) for Q-Controller
BAC-BOX-0	BAC-BOX BACnet Output Module for Q-Controller, Q4C-II & M-Controller-II
BI-BOX-0	BI-BOX 4 Channel Relay Input Module (Max 31 Modules) for Q-Controller
BO-BOX-0	BO-BOX 4 Channel Relay Output Module (Max 31 Modules) for Q-Controller
Q-SWITCHA-0	Q-Switch Series Remote Switch for Q-Controller & M-Controller-II
M-TRANSFORMER	Indoor type enclosed Transformer 120 to 24 VAC 200 VA
IO-BOX-0	IO-BOX DIN Rail Mounting Box for Modules for Q-Controller

## WIRING INFORMATION



TERMINAL	FUNCTION
TB4 TB5 TB6 TB7	NC: Normally Close COM: Common NO: Normally Open 4 x Relays Output
TB10	24VAC 24VDC Power IN
SW1	On OFF Power Switch
TB11 TB12 TB13 TB14	B- A+ 4 x RS-485 Ports for Remote Devices
TB15	B- A+ 1x RS-485 for Modbus
TB16	B- A+ 1x RS-485 for BACnet/IP Module
TB17 TB18 TB19 TB20	SW4 SW3 SW2 SW1 4 x Switch Input
TB1	RLY2 Relay output for Horn
TB2	RLY3 Relay output for Strobe
TB3	24VDC OUT Power OUT
BZ1	buzzer

## ORDERING CODE

Q-CONTROLLER-000-X-G