



GAS CONTROLLER SERIES

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.
- Approval UL2017

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

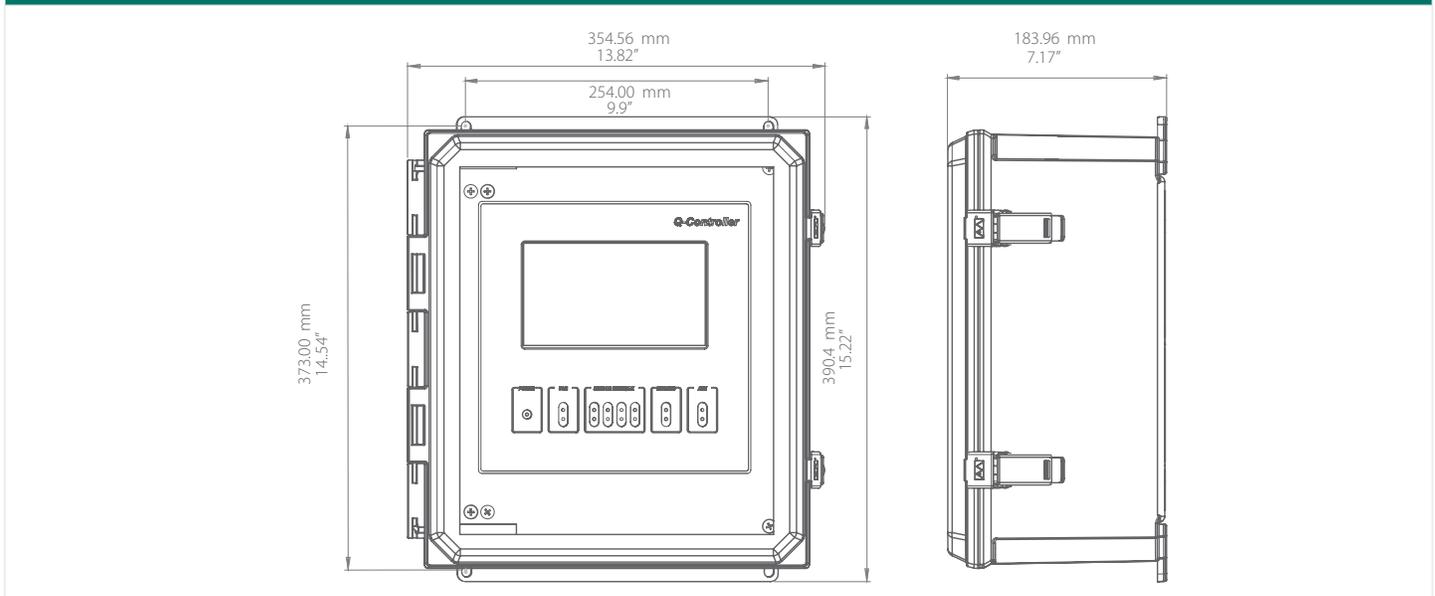
SPECIFICATIONS

POWER SUPPLY	24 VDC nominal, range 18 to 30 VDC 24 VAC nominal, range 15 to 24 VAC 50/60 HZ
CURRENT CONSUMPTION	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"> • Power - Twisted shielded pair Communication (RS-485) • Communication - Belden 9841 or equivalent twisted shielded pair, 120 ohm
POWER OUTPUT	24VDC 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"> • 128 outputs on 4-20mA using AO-BOX module (up to 16 modules)
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

SPECIFICATIONS

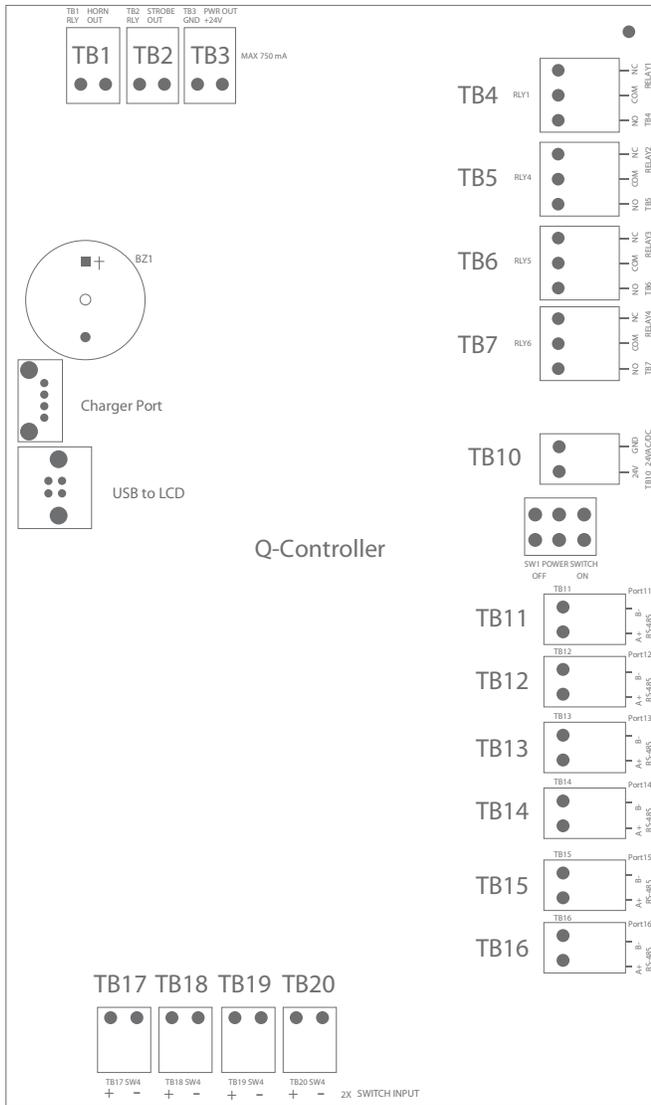
TEMPERATURE SPECIFICATION	Storage: 0°C to 49°C (32°F to 120°F) Operating: -20°C to 50°C (-4°F to 122°F)
HUMIDITY SPECIFICATION	Continuous 5 to 95% RH, non-condensing Intermittent 0 to 95% RH, non-condensing
ENCLOSURE	NEMA Type 1, 2, 3, 4, 4X, 12 and 13 IEC 60529, IP66 Flammability V-O per UL 94 UL94V-V-0
ENCLOSURE MATERIAL	Epoxy carbonate
DIMENSIONS	406 x 305 x 152 mm (16" x 12" x 6")
WEIGHT	5443g (12.0 lbs)
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.

DIMENSIONS

ACCESSORIES

Q-DISPLAY-A-G	Q-Display 7-inch Remote LCD Display for Q-Controller
AI-BOX-0-G	AI-BOX 8 Channel Analog Input Module (Max 16 Modules) for Q-Controller
AO-BOX-0-G	AO-BOX 8 Channel Analog Output Module (Max 16 Modules) for Q-Controller
BAC-BOX-0-G	BAC-BOX BACnet Output Module for Q-Controller, Q4C-II & M-Controller-II
BI-BOX-0-G	BI-BOX 4 Channel Relay Input Module (Max 31 Modules) for Q-Controller
BO-BOX-0-G	BO-BOX 4 Channel Relay Output Module (Max 31 Modules) for Q-Controller
Q-SWITCH-A-G	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-G	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