Critical Environment Technologies™

Controller - GAS DETECTION DATASHEET

QCC Quad Channel Controller



The QCC Quad Channel Controller offers four channel configurations for monitoring toxic, combustible and/or refrigerant gases with versatile control functionality for non-hazardous, non-explosion rated, commercial and light industrial applications. It is designed to accept inputs from up to four remote digital and/or analog transmitters using digital or 4-20 mA analog input. The QCC is available in two models, the QCC-M with Modbus® RS-485 output or the QCC-B with BACnet® RS-485 output for communicating with a Building Automation System (BAS).

Standard features include, three configurable SPDT dry contact relays with field configurable time delays and trigger levels, an LCD display with LED indicators for channel alarm status, relay status and fault conditions, an extensive menu system with password protection, logic control, a USB port for firmware upgrades and a door mounted, loud audible alarm that is ideal for noisy environments. Optional value added features include: an analog output module with data logging, a manual shutoff switch (meets B52 code requirements), a top mounted strobe and a water tight, door mounted audible alarm. The QCC can be connected to several remote devices such as a remote strobe/horn combo, a Remote Display Module and the LNK-AO Analog Output Peripheral device.

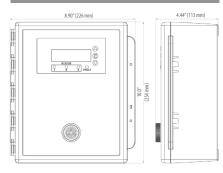
KEY FEATURES

- » Up to 4 channels of gas readings in any combination of analog and/or digital transmitters
- » Configured with either a Modbus® RS-485 output signal for LAN and WAN communications or a BACnet® RS-485 output signal for WAN communications only (for communicating with a BAS)
- » Optional two 4-20 mA outputs with data logging
- » Three 5-amp SPDT dry contact relays
- » 4 line, 20 character LCD display with LED indicators
- » Standard water / dust tight, corrosion resistant enclosure (drip proof); Pending IP54 rating with door mounted, water tight buzzer installed.
- » USB port for firmware upgrades and data logging
- » RoHS compliant circuit boards
- » Thermal resetting fuses

APPLICATIONS

- » Wastewater Treatment Plants
- » Ice Arenas
- » Commercial Indoor Swimming Pools
- » Chiller Rooms
- » Parking Garages
- » ... and many more

TECHNICAL DRAWING



TECHNICAL SPECIFICATIONS

MECHANICAL

Enclosure	ABS / Polycarbonate, rated UL94-5VA; Pending IP54 rating with door mounted, water tight buzzer installed. Copper coated interior to reduce RF interference.
Weight	1.7 kg (3.78 lb)
Size	10.0" x 8.9" x 4.44" (254 mm x 226 mm x 113 mm)

USER INTERFACE

	4x20 character LCD digital display plus
Display	LED panel indicating "STATUS 1, 2 and 3"
	and "FAULT"

INPUT / OUTPUT

Inputs	- Modbus® RS-485 RTU - 4-20 mA analog
Outputs	- Modbus® RS-485 (model: QCC-M) - BACnet® RS-485 to BAS (model: QCC-B) - Two 4-20 mA analog outputs with data logging (optional) - Remote and Peripheral devices on a Modbus® RS-485 network - One drive output for strobe/horn - e.g. RSH-24 (0.5 amp @ 24 V max)
Relay	Three SPDT dry contact relays, rated 5A @ 240 VAC
Audible Alarm	- Standard loud, door mounted buzzer, rated 90 dB @ 30 cm - Optional water tight, door mounted buzzer, rated 85 dB @ 2 ft



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TECHNICAL SPECIFICATIONS CON'T ELECTRICAL	
Wiring	- VAC (line voltage) 3-conductor shielded - LAN Modbus® RS-485 4-conductor shielded - WAN (output to BAS only) RS-485 4-conductor shielded
Fuse	Automatic resetting thermal

Operating Temperature	-20°C to 40°C (-4°F to 104°F)
Humidity	15 - 90% RH non-condensing

CERTIFICATION

Pending: CSA, UL, CE, FCC, BTL

PRODUCT CODES	
QCC-M	Modbus® Output Quad Channel Controller
QCC-B	BACnet® Output Quad Channel Controller
OPTIONS (Factory installed) Add at the end of the "Part Number" above.	
AO	Two 4-20 mA analog outputs with datalogging
IH	Internal heater for cold environment applications
L	Top mounted strobe 24 V (2.75" dia x 5" H)
sw	Manual shutoff switch (meets B52 Code for refrigeration applications)
WA	Door mounted, water tight audible alarm, rated 85 dB @ 2 ft

REMOTE &	PERIPHERAL	DEVICES
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LNK-AO	Analog Output Module, Modbus® RS-485 with four 4-20 mA outputs
RRM-4	Relay Output Module, Modbus® RS-485 with four relays, rated 5A @ 240 volts each
QCC-RDM	Remote Display Module
RAA-90	Remote Audible Alarm, rated 90 dB at 30 cm
RAA-90-W	Remote Audible Alarm water tight, rated 85 dB @ 2 ft
RSH-24V	Remote Strobe and Horn combo

ACCESSORIES

3C3-0000-3F4	option -SW is installed)
SCS-8000-SPG	metal guards for controllers (not compatible if
	Metal protective quard, large, 16 gauge, galvanized



