



PDC multi-channel controllers are programmable analog or digital controllers designed to handle a large number of remote transmitters and perform a wide range of control functions. The micro-controller based circuit provides the user with an almost unlimited range of configuration possibilities including simple or complex zoning, changing alarm set points, time delays and relay addressing. The PDC controller can accept inputs from up to 8 analog transmitters or can handle up to 128 digital transmitters on a RS485 communication bus.

Functions that can be set include relay assignment, time delays on make or break, complex zoning, sensor types and ranges, alarm set points and much more. The controller has a two line backlit LCD display that actively scrolls through all programmed channels and displays the gas name, concentration and alarm status. The PDC features LED alarm indicators, audible alarm with silence button, and RoHS compliant circuit boards.

Use with any CETCI analog transmitters, AST or ATW series, or digital transmitters, DST series. Each PDC is pre-programmed at the factory, and is completely field adjustable using a boardmounted push button keypad.

### KEY FEATURES

- » Up to 8 analog transmitters or up to 128 digital transmitters
- » RS485 communication with digital transmitters
- » RoHS compliant circuit boards
- » Relay output modules
- » Scrolling, two line LCD display
- » LED alarm indicators
- » Completely field programmable
- » Low, mid and high alarm setpoints
- » Audible alarm with silence button
- » Four wire daisychain wiring
- » Eight onboard SPDT relays
- » CSA & UL certified

### APPLICATIONS

- » Parking Garages
- » Repair Shops
- » Arenas
- » Pools
- » Food Processing Plants
- » ... and many more

### TECHNICAL DRAWING

Coming soon...

### SAMPLE ENGINEERING SPECIFICATIONS

*Carbon Monoxide & Combustible Gas Transmitters for Parking Garages*  
Provide digital transmitters with continuous, linear, signal capable of being connected to model PDC series controller on a RS-485 communication bus. The transmitter shall be a CETCI model DST-ECO for Carbon Monoxide and a model DST-SCB for combustible gases. The transmitters shall provide a digital signal representing a Carbon Monoxide measurement range of 0 - 200 ppm CO or 0 - 50% LEL Propane (or other Combustibles gases / vapours). The circuit shall incorporate a long-life HVAC electrochemical sensor for CO or a long life solid-state sensor for combustibles with temperature compensation and an automatic resetting thermal fuse for fault protection.

The transmitter circuit shall be housed in a wall mount, rugged, break resistant, corrosion resistant, PVC junction box with a secured, hinged door. The PVC junction box shall have conduit entry ports on the top, bottom, right side and rear. The circuit shall operate from 24 VDC input voltage supplied from the controller. Wiring shall be 2 conductors for low voltage power, and a two wire shielded twisted pair for the communication bus. Wiring shall be shielded or in conduit. An optional watertight Polycarbonate enclosure shall be available.

Provide digital signal readings to the controller to allow accurate settings for fan control at 25 ppm CO or 10% LEL Propane and a secondary alarm condition at 100 ppm CO or 20% LEL Propane.

The contractor shall provide all wiring, conduit and interconnection required for a successful installation. System should be tested and commissioned after installation, with a report provided after the site visit.

More specification samples are available at [www.critical-environment.com](http://www.critical-environment.com).

### TECHNICAL SPECIFICATIONS

#### CONTROLLER PACKAGES

Up to 2 analog inputs	A02
Up to 8 analog inputs	A08
Up to 8 digital inputs	D08
Up to 16 digital inputs	D16
Up to 24 digital inputs	D24
Up to 32 digital inputs	D32
Up to 64 digital inputs	D64
Up to 96 digital inputs	D96
Up to 128 digital inputs	D128

#### MECHANICAL

Enclosure	Watertight fiberglass reinforced polyester
Weight	4.5 kg (9.8 lbs)
Size	14" x 12" x 8" (356 mm x 305 mm x 203 mm)

#### ELECTRICAL

Power Requirement	90 - 240 VAC, 47 - 63 Hz
Current Draw	500 mA (controller only)
Outputs	4 - 20 mA signals
Relay	8 dry SPDT contact, 5 amps @ 240 V each
Wiring	Analog 3 wire shielded
	Digital daisychain only, shielded
	2 wire 14 gauge stranded power 2 wire 18 gauge twisted pair network
Fuse	Automatic resetting thermal

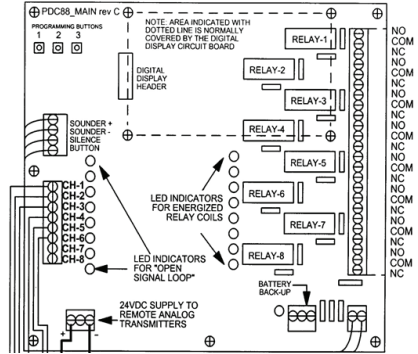
#### ENVIRONMENTAL (sensor dependant)

Operating Temperature	0°C to 40°C (32°F to 100°F)
Humidity	10 - 95% RH non-condensing

#### CERTIFICATION

CSA	Certified
UL	Certified

### WIRING



### PRODUCT CODES

#### ANALOG INPUT MODEL

Up to 2 inputs	PDC-A02-W
Up to 8 inputs	PDC-A08-W

#### DIGITAL INPUT MODEL

Up to 8 inputs	PDC-D08-W
Up to 16 inputs, 1 only CNB-2	PDC-D16-W
Up to 24 inputs, 1 only CNB-2 & 1 only RPS-24V	PDC-D24-W
Up to 32 inputs, 2 only CNB-2 & 1 only RPS-24V	PDC-D32-W
Up to 64 inputs, 4 only CNB-2 & 2 only RPS-24V	PDC-D64-W
Up to 96 inputs, 5 only CNB-2 & 3 only RPS-24V	PDC-D96-W
Up to 128 inputs, 6 only CNB-2 & 4 only RPS-24V	PDC-D128-W

#### OPTIONS (to be added to the end of the product code)

Industrial horn, 103 dB, remote	H
BACnet® output module	BAC
Strobe light, 4" diameter, remote	L

#### ACCESSORIES

Relay module, 8 relays each, remote	RRM-8
Analog output module, 8 4 - 20 mA outputs each	RAO-8
Power supply, 24 V, remote	RPS-24V
CAN network bridge	CNB-2
Strobe & horn combo, remote	RSH-24
Annunciator, remote	RAP-128
Metal protective guard, large, 16 gauge, galvanized metal guards for controllers	SCS-8000-SPG

