Critical Environment Technologies™

ANALOG OR DIGITAL GAS DETECTORS DATASHEET
CXT Explosion Proof Transmitter

FIXED SYSTEMS



The CXT Explosion Proof transmitter delivers reliable, accurate monitoring of toxic or combustible gases in potentially explosive and harsh environments, including hazardous-rated areas. The explosion proof housing is a rugged design that offers greater protection from being damaged by impact type incidents. The Arctic smart sensor package adds programmable heaters for both the sensor (1-watt) and electronics (4-watt) which are automatically activated when temperatures drop below a user selectable level.

The large LCD display shows gas concentrations and engineering units as well as historical data for the last 30 minutes. Navigation through the menu is driven by a magnetic keypad and the user can change alarm set points, instrument configurations and enter into maintenance mode for non-intrusive calibration without opening the enclosure.

Accompanying the LCD display are standard LED alarm indicators that show when low and high alarm conditions are met. The digital model comes with Modbus® RTU output and three 5A relays that can be used to drive audible/visual alarms, or activate exhaust fans. The CXT's security menu allows entry of an authorization code to lock critical parameters.

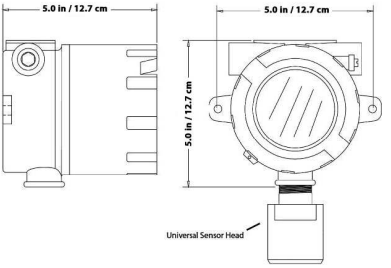
KEY FEATURES

» Large graphic LCD display for real time monitoring
» Menu driven magnetic keypad for user configurations
» Displays values in bar graphs or 30 minute onboard data trends
» Security menu with authorization code access to lock critical parameters
» Rugged construction to withstand impact damage
» Three 5A relays (digital model only)
» 4 - 20 mA analog or Modbus® digital outputs
» Optional heated sensors and electronics for low temperature operation

APPLICATIONS

» Industrial and Commercial Buildings
» Oil and Gas Industry
» Deep Freezers
» Chillers
» Production Facilities
» ... and many more

TECHNICAL DRAWING



TECHNICAL SPECIFICATIONS

MECHANICAL

Enclosure	Durable cast aluminum explosion proof (IP66), Division 1 & 2, Class 1, Groups A, B, C, D
Size	12.7 cm x 12.7 cm / 5.0 " x 5.0"

ELECTRICAL

Power Requirement	10 - 30 VDC, 250 mA @ 24 VDC
Power Safety Mode	Fully automatic system reset - all programmed parameters retained

INPUT / OUTPUT

Outputs	4 - 20 mA or Modbus® RTU RS-485
Relay (CXT-D models only)	Three SPDT dry contact relays, rated 5 amps @ 30 VDC or 240 VAC resistive

USER INTERFACE

Display	64x128 pixels Backlit, LCD graphic display for gas readings, 30 minute trend, bar graph, engineering units
Front Panel	Five indicator lights: AL1, AL2, Fail, In Cal and RS-485

ENVIRONMENTAL (sensor dependant)

Operating Temperature	-40°C to 65°C (-40°F to 149°F) Arctic heater smart sensors operate down to -55°C (-67°F)
Humidity	0 - 90% RH non-condensing

CERTIFICATION

Temperature Code T4.
NRTL CSA certified for Division 1 & 2 hazardous area installations for explosion proof Class 1, Groups A, B, C, D. Designed to meet CSA C22.2 No.152 for combustible monitors and ISA 92.0.01 Part 1 for toxic monitors.
Models with electrochemical sensor types NH_3 and NO_2 are Division 2 and come with a splash guard. All other models are Division 1.

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CXT Explosion Proof Transmitter

ANALOG	PRODUCT CODES	DIGITAL
Single Channel Analog Transmitter	**Internal Electrochemical Sensor**	**Single Channel Modbus Transmitter**
CXT-A-NH3-S	Ammonia (NH_3) sensor (0 - 500 ppm)	**CXT-D-NH3-S**
CXT-A-CO	Carbon monoxide (CO) sensor (0 - 1,000 ppm)	**CXT-D-CO**
CXT-A-CL2-S	Chlorine (Cl_3) sensor (0 - 10 ppm)	**CXT-D-CL2-S**
CXT-A-H2	Hydrogen (H_2) sensor (0 - 2,000 ppm)	**CXT-D-H2**
CXT-A-H2S	Hydrogen sulphide (H_2S) sensor (0 - 500 ppm)	**CXT-D-H2S**
CXT-A-NO2-S	Nitrogen dioxide (NO_2) sensor (0 - 99.9 ppm)	**CXT-D-NO2-S**
CXT-A-O2	Oxygen (O_2) sensor (0 - 25% volume)	**CXT-D-O2**
CXT-A-SO2	Sulphur dioxide (SO_2) sensor (0 - 99.9 ppm)	**CXT-D-SO2**
	Internal Infrared Sensor	
CXT-A-IC4H10	Butane (C_4H_{10}) sensor (0 - 100% LEL)	**CXT-D-IC4H10**
CXT-A-ICO2	Carbon dioxide (CO_2) sensor (0 - 5% volume)	**CXT-D-ICO2**
CXT-A-IC2H6O	Ethanol or Dimethyl Ether (C_2H_6O) sensor (0 - 100% LEL)	**CXT-D-IC2H6O**
CXT-A-IC6H14	Hexane (C_6H_{14}) sensor (0 - 100% LEL)	**CXT-D-IC6H14**
CXT-A-ICH4	Methane (CH_4) sensor (0 - 100% LEL)	**CXT-D-ICH4**
CXT-A-IC3H6	Propylene (C_3H_6) sensor (0 - 100% LEL)	**CXT-D-IC3H6**
CXT-A-IC3H8	Propane (C_3H_8) sensor (0 - 100% LEL)	**CXT-D-IC3H8**
CXT-A-IC7H8	Toluene (C_7H_8) sensor (0 - 100% LEL)	**CXT-D-IC7H8**
CXT-A-IDFV-S	Diesel Fuel Vapours sensor (0 - 100% LEL)	**CXT-D-IDFV-S**
	Internal Catalytic Sensor	
CXT-A-CC2H2	Acetylene (C_2H_2) sensor (0 - 100% LEL)	**CXT-D-CC2H2**
CXT-A-CC4H10	Butane (C_4H_{10}) sensor (0 - 100% LEL)	**CXT-D-CC4H10**
CXT-A-CC2H6O	Ethanol or Dimethyl Ether (C_2H_6O) sensor (0 - 100% LEL)	**CXT-D-CC2H6O**
CXT-A-CC2H4	Ethylene (C_2H_4) sensor (0 - 100% LEL)	**CXT-D-CC2H4**
CXT-A-CH2	Hydrogen (H_2) sensor (0 - 100% LEL)	**CXT-D-CH2**
CXT-A-CCH4	Methane (CH_4) sensor (0 - 100% LEL)	**CXT-D-CCH4**
CXT-A-CC3H8	Propane (C_3H_8) sensor (0 - 100% LEL)	**CXT-D-CC3H8**
CXT-A-CC3H8O	Isopropyl alcohol (C_3H_8O) sensor (0 - 100% LEL)	**CXT-D-CC3H8O**
CXT-A-CC5H12	Pentane (C_5H_{12}) sensor (0 - 100% LEL)	**CXT-D-CC5H12**
CXT-A-CC7H16	Heptane (C_7H_{16}) sensor (0 - 100% LEL)	**CXT-D-CC7H16**
	Internal PID Sensor	
CXT-A-PID	PID gas sensor (specify target gas and range at time of order)	**CXT-D-PID**
	Remote Catalytic Sensor	
CXT-A-R-CH2	Hydrogen (H_2) sensor (0 - 100% LEL)	**CXT-D-R-CH2**
CXT-A-R-CCH4	Methane (CH_4) sensor (0 - 100% LEL)	**CXT-D-R-CCH4**

OPTIONS

S	Ammonia, Chlorine, Nitrogen Dioxide and Diesel Fuel Vapours sensors come with splash guard included
CXP-SPG	Splash guard, add to any other sensor as required

ACCESSORIES

CET-715A-CK1	Calibration Kit for 17, 34, 58, 74, 100 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder
CET-MW	Calibration magnetic wand
CXP-CAL	Calibration adapter

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