Critical
Environment
Technologies™

ANALOG OR DIGITAL GAS DETECTORS DATASHEET
CXT2 Explosion Proof Transmitter

The CXT2 Explosion Proof transmitter is a single channel Transmitter that reliably and accurately monitors toxic, oxygen, combustible, VOC or CO_2 gas concentrations in classified hazardous areas. It can be connected to a controller (FCS), a control panel or a BAS / BMS / DDC system.

The colour, backlit LCD display changes with alarm status. 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. The security menu allows entry of an authorization code to lock critical parameters.

It features non-volatile memory to store historical monitoring and calibration data and the real-time clock and calendar flag all alarm and calibration events.

The CXT2 has the latest Smart Sensor technology and provides sensor life indications and smarter gas detection with simplified solutions and easy calibration.

Optional features include 3 programmable relays (digital models only) and an internal heater for low temperature applications.
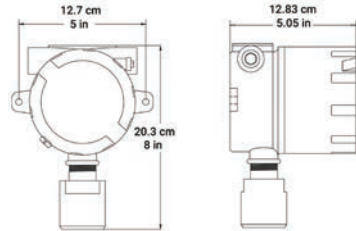
KEY FEATURES

» Single channel, internal or remote sensor
» Remote sensor mount up to 4,000 ft / 1,219 m
» 4 - 20 mA analog or Modbus® digital outputs
» Three 5A @ 30 VDC or 240 VAC relays (digital models only)
» Large graphic LCD display for real time monitoring that changes with channel status
» 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
» Optional heated sensors and electronics for low temperature operation

APPLICATIONS

» Industrial and Commercial Buildings
» Oil and Gas Industry
» Utilities
» Power Plants
» Refineries
» Deep Freezer Rooms
» Chiller Rooms
» Production Facilities
» Extraction facilities
» ... and many more

TECHNICAL DRAWING

12.7 cm / 5 in	12.83 cm / 5.05 in
20.3 cm / 8 in	

TECHNICAL SPECIFICATIONS

MECHANICAL

Enclosure	Durable cast aluminum, IP65 or IP66 rating with splash guard installed Division 1 & 2, Class 1, Groups A, B, C, D
Size	12.7 cm x 12.7 cm / 5.0 " x 5.0"
Weight	2.18 kg / 4.8 lbs

ELECTRICAL

Power Requirement	10 - 30 VDC, 250 mA @ 24 VDC, <6.5 watts with relay board (all relays energized)
Power Consumption	Relays / RS485 Modbus Option Board: 40 mA per relay (120 mA total with all 3 energized); RS-485 use adds 20 mA
Power Safety Mode	Fully automatic system reset - all programmed parameters retained
Digital Wiring	4-conductor, 12 AWG stranded, shielded network wiring (daisy-chain)
Analog Wiring	3-conductor, 16 AWG stranded, shielded

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 or bar graph, channel status backlit colour changes
Front Panel	Magnetic touch pads, LED indicator lights for RX and TX communication status

ENVIRONMENTAL (sensor dependant)

Operating Temperature	-40°C to 65°C (-40°F to 149°F) with Arctic Heater (Option -AH) unit operates down to -55°C / -67°F
Humidity	0 - 90% RH non-condensing

CERTIFICATION

Class 1, Div, 1, Groups A, B, C, D; Class 1, Zone 1, Group IIC, T4
Class 1, Div, 2, Groups A, B, C, D; Class 1, Zone 2, Group IIC, T4

Models with electrochemical sensor types CL2, NH3 and NO2 are Class 1, Div 2 and come with a splash guard.

CSA
C US

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FIXED SYSTEMS

ANALOG	PRODUCT CODES	DIGITAL
Single Channel Analog	**Internal Electrochemical Sensor**	**Single Channel Modbus**
CXT2-A-NH3-S	Ammonia (NH_3) sensor (0 - 500 ppm)	CXT2-D-NH3-S
CXT2-A-CO	Carbon monoxide (CO) sensor (0 - 1,000 ppm)	CXT2-D-CO
CXT2-A-CL2-S	Chlorine (Cl_2) sensor (0 - 10 ppm)	CXT2-D-CL2-S
CXT2-A-HCL	Hydrogen chloride (HCL) sensor (0 - 30 ppm)	CXT2-D-HCL
CXT2-A-H2	Hydrogen (H_2) sensor (0 - 2,000 ppm)	CXT2-D-H2
CXT2-A-H2S	Hydrogen sulphide (H_2S) sensor (0 - 500 ppm)	CXT2-D-H2S
CXT2-A-NO2-S	Nitrogen dioxide (NO_2) sensor (0 - 99.9 ppm)	CXT2-D-NO2-S
CXT2-A-O2	Oxygen (O_2) sensor (0 - 25% volume)	CXT2-D-O2
CXT2-SO2	Sulphur dioxide (SO_2) sensor (0 - 99.9 ppm)	CXT2-D-SO2
	Internal Infrared Sensor	
CXT2-A-IC4H10	Butane (C_4H_{10}) sensor (0 - 100% LEL)	CXT2-D-IC4H10
CXT2-A-ICO2	Carbon dioxide (CO_2) sensor (0 - 5% volume)	CXT2-D-ICO2
CXT2-A-IC2H6	Ethane (C_2H_6) sensor (0 - 100% LEL range)	CXT2-D-IC2H6
CXT2-A-IC2H6O	Ethanol or Dimethyl Ether (C_2H_6O) sensor (0 - 100% LEL)	CXT2-D-IC2H6O
CXT2-A-IC6H14	Hexane (C_6H_{14}) sensor (0 - 100% LEL)	CXT2-D-IC6H14
CXT2-A-ICH4	Methane (CH_4) sensor (0 - 100% LEL)	CXT2-D-ICH4
CXT2-A-IC8H18	Octane (C_8H_{18}) sensor (0 - 100% LEL range)	CXT2-D-IC8H18
CXT2-A-IC3H6	Propylene (C_3H_6) sensor (0 - 100% LEL)	CXT2-D-IC3H6
CXT2-A-IC3H8	Propane (C_3H_8) sensor (0 - 100% LEL)	CXT2-D-IC3H8
CXT2-A-IC7H8	Toluene (C_7H_8) sensor (0 - 100% LEL)	CXT2-D-IC7H8
CXT2-A-IDFV-S	Diesel Fuel Vapours sensor (0 - 100% LEL)	CXT2-D-IDFV-S
	Internal Catalytic Sensor	
CXT2-A-CC3H6O	Acetone (C_3H_6O) sensor (0 - 100% LEL range)	CXT2-D-CC3H6O
CXT2-A-CC2H2	Acetylene (C_2H_2) sensor (0 - 100% LEL)	CXT2-D-CC2H2
CXT2-A-CC4H10	Butane (C_4H_{10}) sensor (0 - 100% LEL)	CXT2-D-CC4H10
CXT2-A-CC2H6O	Ethanol or Dimethyl Ether (C_2H_6O) sensor (0 - 100% LEL)	CXT2-D-CC2H6O
CXT2-A-CC2H4	Ethylene (C_2H_4) sensor (0 - 100% LEL)	CXT2-D-CC2H4
CXT2-A-CC7H16	Heptane (C_7H_{16}) sensor (0 - 100% LEL)	CXT2-D-CC7H16
CXT2-A-CH2	Hydrogen (H_2) sensor (0 - 100% LEL)	CXT2-D-CH2
CXT2-A-CC3H8O	Isopropyl alcohol (C_3H_8O) sensor (0 - 100% LEL)	CXT2-D-CC3H8O
CXT2-A-CCH4	Methane (CH_4) sensor (0 - 100% LEL)	CXT2-D-CCH4
CXT2-A-CCH4O	Methanol (CH_4O) sensor (0 - 100% LEL)	CXT2-D-CCH4O
CXT2-A-CC3H8	Propane (C_3H_8) sensor (0 - 100% LEL)	CXT2-D-CC3H8
CXT2-A-CC5H12	Pentane (C_5H_{12}) sensor (0 - 100% LEL)	CXT2-D-CC5H12
	Internal PID Sensor	
CXT2-A-PID	PID gas sensor, measurement unit is ppm Specify target gas and range at time of order	CXT2-D-PID
	Remote Catalytic Sensor	
CXT2-A-R-CH2	Hydrogen (H_2) sensor (0 - 100% LEL)	CXT2-D-R-CH2
CXT2-A-R-CCH4	Methane (CH_4) sensor (0 - 100% LEL)	CXT2-D-R-CCH4

OPTIONS

AH	Arctic Heater for cold environment applications down to -55°C / -67°F. (incoming 10-30 VDC power must be at least 24 VDC)
S	Ammonia, Chlorine, Nitrogen Dioxide and Diesel Fuel Vapours sensors come with splash guard included

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 for remote calibration
CXP-SPG	Splash guard with calibration port, IP65 or IP66 rated when installed