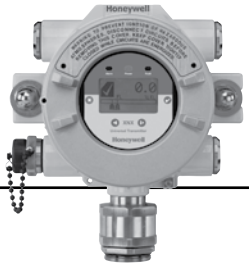
Honeywell

XNX™ SPECIFICATIONS

Universal Transmitter



General Specifications		
Material	LM25 Aluminum, painted (SS316 painted optional)	
Cable Entries	5 conduits/cable entries – (2 right, 2 left, 1 bottom) Available in ¾" NPT, or M25	
Termination	Cage Clamp pluggable Terminal Blocks with retaining screws, 0.5 to 2.5mm (12-28 AWG)	
Mounting	Integral cast mounting tabs provide secure mounting to surfaces and channel. Can be mounted to 2 to 6 inch pipe or ceiling with corresponding mounting kit (optional)	
User interface	Standard Custom Backlit LCD. 2.5" High Resolution DOT Matrix Display. Discrete Alarm and Status indication. Reliable Non-Intrusive 4 button interface magnetic wand access.	
Signal	0-22mA analog current loop output with HART (version 6) compatible standard. Optional relay or Modbus.	
Environmental		
Temperature	-55°C to +65°C / -67°F to +150°F (sensor dependent)	
Humidity	20 to 90% RH non-condensing	
IP Rating	NEMA 4X IP66	
Options		
	Relay Option 3 - SPDT (2 Alarm, 1 Fault) Relays; 250 VAC 5A, 24VDC 5A (Resistive) with External Reset Input or Modbus option: RTU protocol; selectable Baud Rate Optional HART with IS Port	
Operating Voltage		
	18-24 VDC Nominal (EC & mV units 16-32 VDC; IR units 18-32 VDC (Class 2 supply required)	
Power Consumption		
	XNX used with: electrochemical sensor: 6.2 watts; millivolt (catalytic bead or IR cell): 6.5 watts; point Infrared sensor (Searchpoint Optima): 9.7 watts; open-path Infrared (Searchline Excel): 13.2 watts	
Hazardous Area Approvals (Transmitter/Sensor Dependent)		
	UL, cUL classified: UL 1203 and 913 Seventh edition; CSA, CSA 22.2 No. 30, CSA 22.2 No. 157 Class 1, Division 1, Groups B, C, D / Class 1, Zone 1, Groups IIB + H2 T4 Tamb -40c to 65c DEMKO* IEC 60079-0, 4th ED; IEC 60079-15th Ed; IEC 60079-11 5th Ed. NCC INMETRO* Type Approval: EX [ia]d IIB + H2 T4 Tamb -40c to 65c	
Performance Approvals (Sensor Dependent)		
	Flammable gases: CSA 22.2 No. 152, FM* 6310, 6320, DEKRA/EXAM* IEC/EN 60079-29-1, EN 61779-4:2000 Toxic and Oxygen FM* ISA 92.0.01; DEKRA/EXAM* EN 45544:2000, EN 50104: 1999 Functional Safety: TUV EN 61508 SIL 2 Component Certification	
Display Module & User Interface (Standard)		
Display Type	Backlit LCD	
Information Displayed showing	Base Information:	Gas Reading; Gas Name and Units of measurement; Fault and Alarm Status; Large Numeric concentration or LEL display; Bar graph current reading, set points and full scale.
	Fault/Alarm and Operating Status Indication:	Security settings allow multi level operator access for set-up, configuration and calibration Event history stores Time and Date of all Alarm, Diagnostic, Configuration events
Interface	Magnetic wand with terminal screwdriver (supplied each unit)	
4-20mA & HART (Standard Supply)		
Description	Fully configurable isolated 4-20mA & HART output module providing current sink, current source and isolated modes of operation. (supports HART 6.0 protocol)	
Non-intrusive Interface	Optional local IS port to enable HOT connection of a HART handheld configurator	
Operating Modes	Current sink / Current source / Isolated current sink /Conventional or with HART data	
Output Range	0 to 22mA	
4-20mA Signal Accuracy	+/- 1% FS	
Max loop resistance	600 Ohms at 24Vdc loop supply	
Functions Supported via HART	Gas Reading Gas Name and Units of measurement 4-20mA signal level General/Device Information Installation Configuration Forcing of 4-20mA output	Detailed Sensor Information Including: Optical Signal Level Dynamic Reserve (Excel Only) Raw reading 24V supply voltage Temperature	RTC (Excel Only) Calibration and Configuration status Detailed Fault and Warning Information Fault and Alarm History Zero Calibration

* pending

Local IS HART Port (Optional)		
Description	Provides externally accessible IS connections to the XNX transmitter to enable HOT connection of HC275/375 HART or equivalent hand held configurator.	
Installation	Fitted to one of the cable entries on the XNX transmitter.	
Environmental Protection	Terminals protected by cover to IP 66 when not in use	
Relay Module (Optional)		
Description	Provides three fully user configurable relay outputs that can be switched based on the current gas level and/or status of the transmitter. Provides 2 x SPCO alarm and 1 x SPCO fault relays. Single Pole Double Throw SPDT. Option PCB Factory installed in display module.	
Installation	Fitted into housing base either at the factory or in the field by qualified service engineer.	
Rating	Maximum: 240 VAC, 5A (non inductive load) / 24 VDC 5A CES	Minimum: 5V, 10mA (non inductive load)
Electrical Connections	Fault: Common, Normally Open, Normally Closed Alarm 1: Common, Normally Open, Normally Closed Alarm 2: Common, Normally Open, Normally Closed	
Configuration	Default	Configurable Options
	Fault Relay: Normally energized Non latching Signal inhibit as fault	Fault Relay: Normally energized / normally de-energized None Enable/disable
	Alarm 1 / 2 Relays: Normally de-energized Non latching Alarm rising on gas reading Alarm level 20% and 40% of scale Hysteresis of 2% of scale	A1 / A2 Relays: Normally energized / de-energized Latching / non latching Alarm on rising / falling Alarm level 10% to 90% of full scale
Re-setting of Latched Relays	Easily accessible interface on display (if used) or via HART interface (local or remote)	
Note	Use of the Relay Module or 'Other' Communications Module (E.g. Foundation Fieldbus) is mutually exclusive. However, relay function may be used in conjunction with standard communication output i.e. 4-20mA with HART.	
Relay Specific Functions via HART Interface	Relay status information / Reset of latched conditions / Configuration of relays Forcing of relay state Reset through non intrusive User Interface. Remote Switch closure using Remote Reset input Remotely through HART	
Modbus RTU Module (Optional)		
Description	The Modbus output module provides an Isolated RS485 output to enable the connection of the XNX transmitter to a multi-drop Modbus network	
Installation	Fitted into housing base either at the factory or in the field by qualified service engineer.	
Connections	RS485+, RS485-, Drain	
Physical Layer	Isolated RS485, 1200 to 19.2K Baud	
Maximum No. of Nodes	254 XNX compatible transmitters only	
Protocol	Modbus RTU	
Functions Supported	As per Foundation Fieldbus Module (Optional) - see above **Foundation Fieldbus Module (Optional)**	
Description	Foundation Fieldbus compliant digital communications interface enables connection of the XNX transmitter to a multi-drop Foundation Fieldbus H1 network.	
Installation	Fitted into housing base either at the factory or in the field by qualified service engineer.	
Connections	Sig+, Sig- and Screen	
Physical Layer	Conforms to IEC 1158-2 and ISA 50.02, 31.25Kbits/s	
Maximum No. of Nodes	32	
Functions Supported	Gas Reading Gas Name and Units of measurement Instrument status (OK, warning, fault, over-range) General/Device Information Remote zero and span calibration (detector dependent)	Detailed Sensor Information Including: Optical Signal Level Dynamic Reserve (Excel Only) Raw reading 24V supply voltage Temperature RTC (Excel Only) Calibration and Configuration status
		Detailed Fault and Warning Information: Fault and Alarm History Zero Calibration

Further information is available upon request.

* Not available at time of publication. Please call your Honeywell Analytics sales person.

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HART® is a registered trademark of the HART Communication Foundation.

MODBUS® is a registered trademark of Schneider Automation Inc.

Foundation™ is a trademark of Fieldbus Foundation.

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