



WX 16

- 16-Channel Controller
- Analog and Digital Inputs
- Programmable Relays
- RS-485 ModBus RTU Master/Slave
- Wireless Options
- Graphical LCD Display
- Data Trending (24hr)



CERTIFICATIONS





Detection, Protection, Innovation

Oldham SAS has more than 100 years of experience in safety, gas and fire detection systems. Oldham SAS is headquartered in Arras, France, and is a subsidiary of Tyco Gas and Flame Detection. Oldham employs hundreds of people globally with operations in France, USA, China, India and Germany. Oldham's mission is to be the best provider of fixed-point gas detection systems worldwide. Its wide range of application-driven products and expertise embody performance, quality and reliability.



RELIABLE

The WX16 controller is designed to offer maximum reliability and functionality.

- Security mode allows for lockout of critical parameters
- NEMA 4X/7 Enclosures
- Non-volatile memory retains all configuration data
- CSA Div 2 A,B,C,D and C22.2 No. 152 approved

VERSATILE

The WX16 controller can be configured in multiple ways to meet your application needs. It offers analog, digital, and wireless capability and comes standard with four common alarm relays.

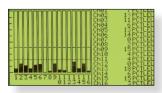
- Accepts up to 16 4-20mA, bridge sensor, ModBus, or wireless channels
- 4-20mA, ModBus RTU, wireless ModBus output
- Four common SPDT relays standard
- Optional discrete relays
- Dual ModBus master/slave capability

EASY to USE

The WX16 is designed to offer the user convenient features and ease of use.

- Touch Key and Non-Intrusive (magnetic) Operation
- Graphical Backlit LCD Display
- Independent Alarm LEDs
- Built-In Piezo Siren

Display Screens



Main Screen



Trend Screen



Combo Screen

Applications

- Oil and Gas Industry
- Offshore Drilling
- Utilities and Power
- Petrochemical Industry
- Municipal Water and Waste Treatment
- Food and Beverage Production





WIRELESS

Wireless communication is becoming increasingly popular in gas detection, and it is sometimes the only way to ensure safety in existing infrastructure or remote locations.

The WX16 can be configured to accept wireless inputs from an OLCT 200 transmitter, accept wireless ModBus inputs from a ModBus slave device, or communicate wirelessly to a compatible ModBus master device. Additionally, the WX16's wireless option offers the following features:

- 900MHz or 2.4GHz FHSS
- 10mW 1W Adjustable Tx Power
- CSA Div 1 and DIV 2 Antennas
- 256-bit Encryption
- Dual Master/Slave Operation
- Indoor Range up to 3000' (900 meters)
- Outdoor Range up to 10 miles (16 km)
- -100dBm Receiver Sensitivity

OLDHAM also offers a variety of wireless solutions compatible with the WX16, including wireless transmitters, controllers, and solar-powered field monitors as well as wireless repeaters and accessories.



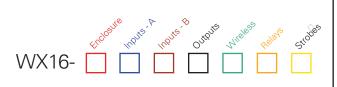
OLCT 200



WX64

TECHNIC	CAL SPECIFICATIONS
Display	LCD (128 x 240 pixel) with backlighting
Indicators	48 discrete LEDs for three alarm levels (Low, High, and Fault) for each of the 16 channels as well as 4 LEDs for common alarms and horn relays
Interface Buttons	Five buttons - Dual Touch Key and Magnetic (Non-Intrusive)
Inputs	16 channels (4-20mA, Bridge Sensor, ModBus, and Wireless) 4-20mA inputs are into 100 ohm impedance and include +power for each channel for routing power to 2- or 3-wire transmitters Bridge sensor inputs allow for adjustable sensor excitation and balance settings Up to 16 channels can be received wirelessly from an OLCT 200 transmitter configured with a wireless package or from a wireless ModBus slave
Outputs	Opt. 8/16-channel 4-20mA output (max load 800 ohms @24VDC) RS-485 ModBus RTU slave Wireless ModBus slave (900MHz or 2.4GHz)
Relays	Std. Four common, 5amp, 30VDC or 250VAC resistive Form C (2x-Alarm, 1x-Fault, 1x-Horn) Opt. Eight discrete, 5amp, 30VDC or 250VAC resistive Form C Additional discrete relays may be added in groups of eight Relays can be configured into up to 3 zones
ModBus	Dual RS-485 ModBus RTU master/slave (9600 Baud)
Power Supply	Std. Accepts 10-30VDC; 12 watts max Std. 100-240 VAC / 24VAC 150W
Wireless	900MHz or 2.4GHz FHSS (Frequency Hopping Spread Spectrum) Single or Dual port radio modems allows for simultaneous transmit and receive 256-bit AES Encryption (meets FIPS-197) 10mW - 1W adjustable transmit power (900MHz), 120mW (2,4GHz)
Enclosure	Panel / Rack Mount - 5.22" (132 mm) H x 10.60" (269 mm) W x 9.60" (244 mm) D - Weight Approx. 7lbs. (3.2 kg) Non-Metallic Wall Mount - NEMA 4X - 16.00" (406 mm) H x 13.16" (334 mm) W x 8.5" (216 mm) D - Weight Approx. 17lbs. (7.7 kg) Stainless Steel Wall Mount - NEMA 4X - 20.70" (526 mm) H x 15.75" (400 mm) W x 8.0" (203 mm) D - Weight Approx. 30lbs. (13.6 kg) Explosion-Proof Aluminum Wall Mount - NEMA 4 / 7, for Div.1 & Div. 2 Groups B,C,D - 22.38" (568 mm) H x 17.75" (451 mm) W x 9.06" (230 mm) D - Weight Approx. 110 lbs. (49.9 kg)
Operating Temp	-25°C to 60°C
Humidity:	0% - 90% Relative Humidity; Non-Condensing
Approvals	CSA C22.2 No 152 for combustibles CSA C22.2 No 1010.1 and ISA S82.02 UL 1604 / CSA C22.2 No 213 (Div 2 Groups A,B, C, D) EN55011 and EN61000





EXAMPLE: WX16-3100420

A WX16 controller with stainless steel NEMA 4X housing configured with 8 channels of 4-20mA inputs and dual 2.4GHz wireless ModBus ports. The dual port wireless configuration can also act as a simultaneous ModBus master/slave. The controller has also been configured with 4 common relays, eight discrete relays, and has a 150W power supply standard.

INPUTS - A INPUTS - B OUTPUTS **WIRELESS ENCLOSURE** Panel Rack Mount 4-20mA Channels **Bridge Sensor Channels** 4-20mA Channels 0 None 1 4 Common Relays 0 None 2 Non-Metallic, NEMA 4x 0 None 0 None 0 None 900MHz Single Port 2 4 Common + 8 Discrete Red (Div 2) 1 1 to 4 3 Stainless Steel, NEMA 4x 1 1 to 8 900MHz Dual Port 3 4 Common + 16 Discrete 1 to 8 Amber (Div 2) Aluminum, NEMA 4X/7, XP 2 9 to 16 2 5 to 8 2 9 to 16 2.4Ghz Single Port 4 4 Common + 24 Discrete 3 Blue (Div 2) 3 9 to 12 2.4GHz Dual Port 4 Common + 32 Discrete Green (Div 2) 4 13 to 16 6 4 Common + 40 Discrete 5 Strobe/Horn Combo (IP66) 7 4 Common + 48 Discrete

ACCESSORIES

- 100db Piezo Alarm (P/N 1000-1892)
- RS-485 3-Port Hub (for dual master operation) (P/N 10-0277)
- Human Machine Interface (HMI) Software (P/N WX-HMI)
- Full Width 19" Rack (P/N 10-0208)
- Wireless Antenna Options

(Consult Factory)

- NEMA 4X Expansion Enclosure (P/N 10-0138)
- Div 2 Quick Connector and Cable Set Options (Consult Factory)

Our fixed detector Range



As an ISO 9001 & ISO 14001 approved company, OI DHAM quality assurance programmes demand the continuous assessment and improvement of all OI DHAM products. Information in this leaflet could thus change without notification and does not constitute a product specification. Please contact OLDHAM or their representative if you require more details

> **EMEAI** Oldham Headquarter

ZI Est. Rue Orfila. CS 20417 62027 ARRAS CEDEX France

Tel: +33 (0) 3 21 60 80 80 Fax: +33 (0) 3 21 60 80 00 info@oldhamgas.com

AMERICAS - Houston (USA)

4320 Goldmine Ro Monroe, NC 28110 USA

Tel: +1 800 247 7257 Fax: +1 704 291 8330 sh-sale@tycoint.com

ASIA PACIFIC - Shanghai (CN)

Oldham Instrument Shanghai Ltd. 290 Guiqiao Road Pudong, Shanghai 201206 People's Republic of China Tel: +86 21 3127 6373 Fax : +68 21 3127 6365 sales@oldhamgas.com

www.tycoGFD.com / Copyright © 2015Tyco Gas and Flame. / All rights reserved. / GF-30013 / wx16_Lit_EN_A4_8Sept2015











