WX64

- 64-Channel Controller
- Analog and Digital Inputs
- Programmable Relays
- Wireless Options
- RS-485 ModBus Master/Slave
- Graphical Color LCD Display
- Data Logging
- Configurable into 8 Zones
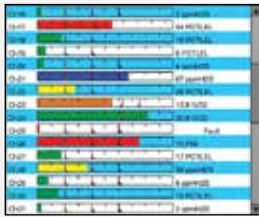- Embedded Web Page Interface

OLDHAM

WX64

APPLICATIONS

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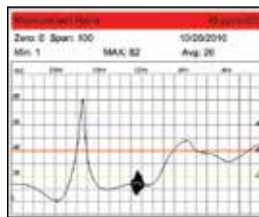- Food and Beverage Production

FEATURES

RELIABLE

At OLDHAM, we understand the cost of equipment downtime and false alarms, so we ensure all of our products are designed with maximum reliability in mind.

- Security mode allows for lockout of critical parameters
- NEMA 4X/7 Enclosures
- Non-volatile memory retains all configuration data

VERSATILE

The WX64 controller can be configured in multiple ways to meet your application needs. It offers analog, digital, and wireless capability and comes standard with five relays.

- Accepts up to 64 4-20mA, bridge sensor, ModBus RTU, ModBus TCP, and wireless channels
- 4-20mA, ModBus RTU, wireless ModBus, and ModBus TCP output
- Data logging (SD card)
- Five common SPDT relays standard
- Optional 16-channel programmable relay board
- Optional discrete relays
- Quad RS-485 ports allow for dual ModBus master/slave and multiple ModBus master operation
- SD card holds 1 year of data
- Internal memory logs up to 2000 events

EASY to USE

The WX64 is designed to offer the user convenient features and ease of use.

- Touch Key and Non-Intrusive (magnetic) Operation
- Graphical Backlit LCD Display
- Color Display of Alarms
- Independent LEDs for Standard Relays
- Built-In Piezo Siren
- Remote Alarm Visualization via Embedded Web Pages
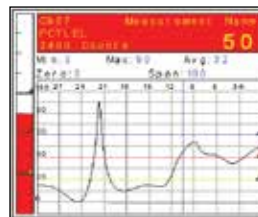
DISPLAY SCREENS

MAIN DATA SCREEN
Displays all active channels on the same screen. Cells indicate alarm status by color.

BAR GRAPH SCREEN
Side scroll bar selects groups of 16 to be displayed. Bars change color to indicate alarm.

24HR TREND SCREEN
Displays last 24 hours for one channel. Current, min, max, and average readings displayed at top.

COMBO SCREEN
Displays last 30 min. for one channel. Includes trend graph, bar graph, statistical data, and current reading.

ZONE SCREEN
Displays all eight possible zones. Cells change colors and name flashes indicating alarm.

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 WX64 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 WX64'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
- Both Master and 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 WX64, including wireless transmitters, controllers, and solar-powered field monitors as well as wireless repeaters and accessories.
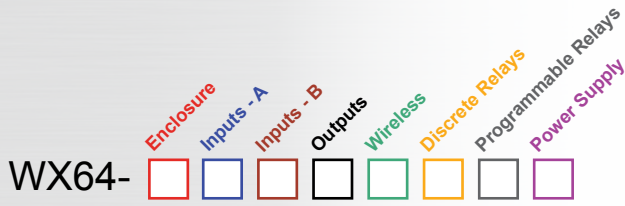
OLCT 200

WX4

WX 16

TECHNICAL SPECIFICATIONS

Display:	Color LCD (320 x 240 pixel) with backlighting
Indicators:	5 independent LEDs indicating status of five standard relays
Interface Buttons:	Eight buttons - Dual Touch Key and Magnetic (Non-Intrusive)
Inputs:	Up to 64 channels (4-20mA, Bridge Sensor, ModBus RTU, ModBus TCP, and wireless)

4-20mA inputs are into 150 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 64 channels can be received wirelessly from an OLCT 200 transmitter configured with a wireless package, from a wireless ModBus slave device, or from a ModBus TCP device |
| **Outputs:** | Opt. 16/32/48/64-channel 4-20mA output (max load 800 ohms @24VDC)

RS-485 ModBus RTU slave

Wireless ModBus slave (900MHz or 2.4GHz)

ModBus TCP slave |
| **Relays:** | Std. Five relays, 5amp, 30VDC or 250VAC resistive Form C (3 Programmable, 1 Common Fault, 1 Horn)

Opt. 16 channel programmable 5amp, 30VDC or 250VAC resistive Form C

All relays are programmable and allow for voting based on the alarm state of each of the 64 channels and/or each of eight zones
Additional discrete relays may be added in groups of 16 |
| **ModBus:** | Both RS-485 ModBus RTU Master and Slave
Redundant ModBus operation
(Opt) Wireless ModBus RTU master/slave
(Opt) Dual Isolated RS-485 ModBus RTU for multiple masters
ModBus TCP master/slave via standard Ethernet port
Baud Rate: 9600, 19200, 38400, 57600, 115200 selectable |
| **Power Supply:** | Std. Accepts 10-30VDC; 12 watts max
Std. 100-240 VAC / 24VAC 150W
Opt. 100-240 VAC / 24VAC 600W |
| **Wireless:** | 900MHz or 2.4GHz FHSS (Frequency Hopping Spread Spectrum)

Multiple port radio modems allow 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
-6.98" H x 10.60" W x 9.36" D
-17 mm H x 269 mm W x 238 mm D
-Weight Approx. 7lbs. (3.2 kg)	Stainless Steel Wall Mount
-Not Yet Available.
		Explosion-Proof Aluminum Wall Mount
	Non-Metallic Wall Mount
-NEMA 4X
-24.61" H x 24.11" W x 9.51" D
-625 mm H x 612 mm W x 242 mm D
-Weight Approx. 55lbs. (25 kg)	-NEMA 4 / 7, for Div.1 & Div. 2 Groups B,C,D
-28.38" H x 17.28" W x 9.00" D
-721 mm H x 439 mm W x 229 mm D
- Weight Approx. 110lbs. (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

OLDHAM

WX64

WX64- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Enclosure — Inputs - A — Inputs - B — Outputs — Wireless — Discrete Relays — Programmable Relays — Power Supply

EXAMPLE: WX64-22104201

A WX64 controller with non-metallic NEMA 4X enclosure configured with 32 channels of 4-20mA inputs and 16 channels of bridge sensor inputs, leaving remaining channels to be input through the configured dual 2.4GHz wireless ModBus RTU master port or through the ModBus TCP via the Ethernet port. The dual port wireless configuration can also act as a simultaneous ModBus master/slave. The controller has also been configured with 16 additional discrete relays and comes standard with a 150W power supply.

$A + B \leq 4$

ENCLOSURE	INPUTS - A	INPUTS - B	OUTPUTS	WIRELESS	RELAYS	PROG. RELAYS	Power
1 19" Rack Mount	**4-20mA Channels**	**Bridge Channels**	**4-20mA Channels**	**0** None	**1** 5 Standard Relays	**0** None	**1** 100-240VAC / 24VDC 150W
2 Non-Metallic, NEMA 4X	**0** 0	**0** 0	**0** 0	**1** 900MHz Single Port	**2** Std + 16 Discrete	**1** 16 Programmable	**2** 100-240VAC / 24VDC 600W
3 Stainless Steel, NEMA 4X	**1** 1 to 16	**1** 1 to 16	**1** 1 to 16	**2** 900MHz Dual Port	**3** 5 Std + 32 Discrete		
4 Aluminum, NEMA 4X/7, XP	**2** 17 to 32	**2** 17 to 32	**2** 17 to 32	**3** 2.4Ghz Single Port	**4** 5 Std + 48 Discrete		
	3 33 to 48	**3** 33 to 48	**3** 33 to 48	**4** 2.4GHz Dual Port	**5** 5 Std + 64 Discrete		
	4 49 to 64	**4** 49 to 64	**4** 49 to 64				

ACCESSORIES

- 100db Piezo Audible Alarm (P/N 1000-1892)
- Red Xenon Strobe Light (suitable for Div 2) (P/N 10-0284)
- Amber Strobe Light (suitable for Div 2) (P/N 10-0285)
- Blue Strobe Light (suitable for Div 2) (P/N 10-0316)
- Green Strobe Light (suitable for Div 2)(P/N 10-0286)

- Dual Strobe/85db Horn (non-hazardous) (P/N 1000-1906)
- RS-485 3-Port Hub (for dual master operation) (P/N 10-0277)
- Human Machine Interface (HMI) Software (P/N WX-HMI)
- Wireless Antenna Options (Consult Factory)
- Div 2 Quick Connector and Cable Set Options (Consult Factory)

OUR FIXED DETECTOR RANGE

OLCT 200   **OLCT 10**   **OLCT 100**   **OLCT 80**   **iTrans 2**   **CTX 300**

OLCT 60   **OLCT 60 / OLCT IR**   **OLCT IR**   **Flame Detector**

ISO 9001:2008 CERTIFIED ✓   ISO 14001:2004 CERTIFIED ✓

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