OLDHAM

OLCT 200

- Detection of explosive gases, toxic gases, or oxygen
- Non-Intrusive Calibration
- Smart Sensors
- HART® Communication
- Programmable Relays
- Hot Swappable Sensors (IS Versions)
- 2-wire, 3-wire, ModBus, or wireless

CERTIFICATIONS

CSA
C US

SIL 2
HARDWARE

HART®
COMMUNICATION PROTOCOL

The Fixed Gas Detection Experts

www.oldhamgas.com

OLDHAM

OLCT 200

APPLICATIONS

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

IR SENSOR

The infrared sensor provides detection of explosive gases in more severe environmental conditions, where the presence of poisons could harm the use of a catalytic cell.

- Methane
- Carbon Dioxide
- Propane
- Propylene
- Ethane
- Methanol

Cross-reference factors are available for many other common gases.

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.

- SIL-2 – Hardware assessed to be SIL-2 capable
- Security mode allows for lockout of critical parameters
- "Fault Supervision" circuitry
- Programmable warm-up and cal delays to avoid false alarms

VERSATILE

The OLCT 200 can be configured to meet nearly any application through its state-of-the art features and options.
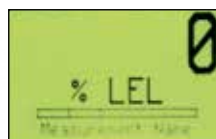
- Explosion-proof
- Intrinsically Safe
- HART® (opt)
- RS-485 ModBus (opt)
- Stainless Steel Enclosure (opt)
- Programmable Relays (opt)
- 2-wire, 3-wire Installations
- Wireless Communication (opt)
- Cold Climate Heater (opt)
- Dual Gas Sensing (opt)
- Remote Sensing (opt)
- Large Sensor Offering—Electrochemical, Catalytic, Infrared, and Photo Ionization Detection Sensors
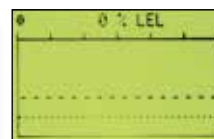
EASY TO USE

The OLCT 200 is designed to offer the user convenient features and ease of use.

- Smart Sensors
- Large Graphical Display
- 30min Trending
- Backlit LCD (excluding 2-wire)
- Non-Intrusive Calibration
- Split Screen Display (dual sensor option)
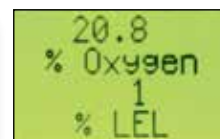- Visual Alarm LEDs

DISPLAY SCREENS

MAIN SCREEN   TREND GRAPH   SPLIT SCREEN

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 OLCT 200 wireless option offers many benefits to meet your application needs.

- 900MHz or 2.4GHz FHSS
- 10mW – 1W Adjustable Tx Power
- CSA Div 1 and Div 2 Antennas
- 256-bit Encryption
- Indoor Range up to 3000' (900 meters)
- Outdoor Range up to 10 miles (16 km)
- High Receiver Sensitivity
- Battery & Solar Powered Options

OLDHAM also offers a variety of wireless solutions compatible with the OLCT 200, including wireless controllers and solar-powered field monitors as well as wireless repeaters and accessories.
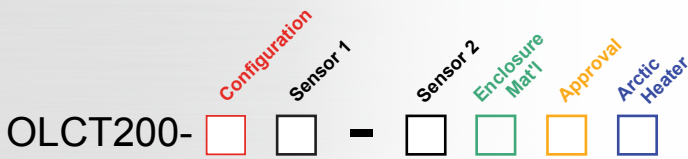

WX4
Controller

WX16
Controller

WX64
Controller

TECHNICAL SPECIFICATIONS

Sensors	Combustible Gases: Catalytic, Infrared Toxic / Oxygen: Electrochemical, PID
Detected Gases	See Ordering Guide
Material	Enclosure: Epoxy Coated Aluminum or 316 Stainless Steel Sensor: 316 Stainless Steel
Display	Backlit LCD (2-Wire models do not have backlight)
Input Voltage	10 - 30 VDC Lithium-Ion Battery (select wireless models)
Power Consumption	25mA @ 24VDC (EC Sensor) 100mA @ 24VDC (Cat, IR, PID Sensors) +120mA @ 24VDC (for added energized relays) +20mA @ 24VDC (for added RS-485 ModBus) +210mA @ 24VDC (for added Arctic Heaters)
Ingress Protection	NEMA 4X, IP66
Cable	2-wire, 3-wire, or 4-wire, shielded.
Max. cable loop resistance	500Ω @ 24VDC (2-wire configs) 750Ω @ 24VDC (3-wire configs)
Output Signal	Standard: 4-20mA (analog), 2-wire (sink), 3-wire (source) Optional 1: Dual Isolated 4-20mA (source) Optional 2: RS-485 ModBus (9600 Baud) Optional 3: Wireless (900MHz or 2.4 GHz) Optional 4: HART® Protocol
Alarm Relays (opt)	3 Relays (2 User Programmable, 1 Fault) Form C (SPDT) 5 AMP @ 30VDC or 240 VAC "RESISTIVE" Relays 1&2 are configurable for low and high alarms, normally energized or normally de-energized, and latching or non-latching Fault Relay is always normally energized
Wireless (opt)	900MHz or 2.4GHz FHSS (Frequency Hopping Spread Spectrum) 256-bit AES Encryption (meets FIPS-197) 10mW - 1W Adjustable Transit Power (900Mhz only) Div 1 XP and Div 2 Configurable

Approvals	Consult factory for current approval status
	CSA - Class 1, Div. 1, 2
	    - Groups A, B, C, D (2-wire config. only)
	    - Groups B, C, D (3-wire config. only)
	IS barrier required for intrinsically safe installations!
	SIL-2 - hardware SIL-2 capable per EN 61508 (exida)

Dimensions	5.0" (127mm) W x 7.8" (197mm) H x 5.1" (130mm) D Shipping Weight Appox. 7 Lb (3.2 kg)
Operating Temperature	-40°C to 60°C - (sensor specific)

OLCT 200

OLCT200- ▢ ▢ - ▢ ▢ ▢ ▢

Configuration · Sensor 1 · Sensor 2 · Enclosure Mat'l · Approval · Arctic Heater

ENCLOSURE MATERIAL
A	Aluminum (Epoxy Coated)
B	316 Stainless Steel

APPROVAL
A	CSA
B	ATEX (not yet available)

ARCTIC HEATER
A	No Heater
B	Arctic Heater

GAS SENSORS

Gas sensors are available in the following technologies:

- ◆ Catalytic Bead
- ● Electro-Chemical
- ▲ Infrared
- ■ Photo-ionization Detection

Visit our website www.oldhamgas.com to find a current listing of available sensors for the OLCT 200.

							SENSOR 1		SENSOR 2	
Config Code	**Wiring**	**HART®**	**RS-485 ModBus**	**On-Board Relays**	**Dual Isolated 4-20mA Output**	**Wireless Communication**	**Location**	**Options**	**Location**	**Options**
A*	2-Wire					n/a	On-Board	●	n/a	~
B**	3-Wire					n/a	On-Board	◆●▲■	n/a	~
C**	3-Wire					n/a	Remote	◆ ▲■	n/a	~
D**	3-Wire	✓				n/a	On-Board	◆●▲■	n/a	~
E**	3-Wire	✓				n/a	Remote	◆ ▲■	n/a	~
F**	3 or 4-Wire		✓	✓		n/a	On-Board	◆●▲■	n/a	~
G**	3 or 4-Wire		✓	✓		n/a	Remote	◆ ▲■	n/a	~
H**	4-Wire					n/a	On-Board	●	On-Board	◆ ▲■
J**	4-Wire					n/a	On-Board	●	Remote	◆ ▲■
K**	4-Wire		✓	✓		n/a	On-Board	●	On-Board	◆ ▲■
M**	4-Wire		✓	✓		n/a	On-Board	●	Remote	◆ ▲■
N**	6-Wire				✓	n/a	On-Board	●	On-Board	◆ ▲■
P**	6-Wire				✓	n/a	On-Board	●	Remote	◆ ▲■
R**	Wireless					900MHz / Battery	On-Board	●	n/a	~
S**	Wireless					900MHz / 10-30VDC	On-Board	◆●▲■	n/a	~
T**	Wireless					900MHz / 10-30VDC	Remote	◆ ▲■	n/a	~
U**	Wireless					2.4GHz / Battery	On-Board	●	n/a	~
V**	Wireless					2.4GHz / 10-30VDC	On-Board	◆●▲■	n/a	~
W**	Wireless					2.4GHz / 10-30VDC	Remote	◆ ▲■	n/a	~

Note: Configurations A-P come with a 4-20mA Output.
* can be installed as IS or XP (NH3 & HCl are IS only)
** XP install only (NH3 & HCl not available)

NOTES

- Remote sensors do not have Smart capability.
- Remote sensors cannot be Electro-Chemical.
- Wireless configurations come standard with Div 2 omnidirectional antenna. Div 1 omnidirectional and other antennas available upon request.
- Intrinsically safe installations require 2-wire model and appropriate IS barrier, such as P/N 10-0263.

ACCESSORIES

- **Calibration Adapter (P/N 10-0203)**
- **Splash Guard w/ Remote Cal (P/N 10-0198)**
- **Magnetic Mounting Kit (P/N 10-0319)**
- **Duct Mount Kit (PVC) (P/N 10-0379)**
- **Duct Mount Kit (Stainless Steel) (P/N 10-0270)**
- **Pole Mount Kit (P/N 10-0378)**
- **Protective Cover (P/N 6123716)**
- **Wall Mounted Collecting Cone (P/N 6331169)**
- **Ceiling Mounted Collecting Cone (P/N 6331168)**
- **Intrinsically Safe Barrier (P/N 10-0263)**
- **CSA Sensor Head Tool (P/N 10-0187)**

Consult factory for additional antenna options.

Consult factory for Div 2 quick connectors and cable sets.

ISO 9001:2008 CERTIFIED
ISO 14001:2004 CERTIFIED

Test and calibration gas
For your safety, test and calibrate your gas monitors regularly.

Consult factory for specific calibration gas availability.

OLDHAM

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