Q: Which gases are detected by the OLCT 10N?

A. The following gases are detected by the OLCT 10N:

Gases	Range
Methane (CH_4)	0-100% LEL
Hydrogen (H_2)	
Propane (C_3H_8)	
Butane (C_4H_{10})	
Oxygen (O_2)	0-30% vol
Carbon monoxide (CO)	0-300 ppm 0-1000 ppm
Hydrogen sulfide (H_2S)	0-30 ppm 0-100 ppm
Nitrogen monoxide (NO)	0-100 ppm 0-300 ppm
Nitrogen dioxide (NO_2)	0-10 ppm 0-30 ppm
Ammonia (NH_3)	0-100 ppm 0-1000 ppm
Carbon dioxide (CO_2)	0-5000 ppm 0-5% vol 0-100 vol

Q. What is the certification of the OLCT 10N?

A. The OLCT 10N is IP65 and ATEX II 3 GD certified. It is approved for use in ATEX zones 2 (gas) and 22 (dust) for explosive gases. It also meets the requirements of EN 50270 (electromagnetic compatibility). The OLCT 10N for the detection of toxic gases and CO_2 are not ATEX certified and should only be installed in safe areas.

Q : Which controllers are compatible with the OLCT 10N?

A: The OLCT 10N can only be connected to a digital line on the MX 43, MX 32, MX 16 or MX 256 control unit. It is not possible to connect an OLCT 10N to an MX 62 or a CPS..

Q : Can the OLCT 10N be used with a PLC?

A: As the OLCT 10N protocol is proprietary, the sensor should be used in conjunction with an MX 16 or MX 32.

Q : What type of cable should I use?

A: A shielded 2-pair twisted pair cable must be used: one pair is used to supply power to the detectors, the other for RS485 communication between the modules.

Q: How many OLCT 10N detectors can I connect on one line of an MX43?

A: The following tables summarise the maximum detection distance (in metres) on a single MX 43 line as a function of the number of OLCT 10N and cable cross-section without the need for an external power supply.

Distances for OLCT 10N Toxic and O_2

(Whatever the MX 43 motherboard version)

Number of OLCT 10N designed to detect toxic gases (except CO2) or oxygen	Cable core size		
	0.9 mm^2 (AWG 18)	0.5 mm^2 (AWG 20)	0.22 mm^2 (AWG 24)
10			1000 (3200ft)
20			900m (2950ft)
25		1000m (3200ft)	500m (1600ft)
32	1000m (3200ft)	800m (2625ft)	300m (980ft)

OLCT 10N

FAQ

Q: How many OLCT 10N detectors can I connect on one line of an MX32?

A: The below table shows how many OLCT10N can be attached on a MX 32 (2 lines) and the maximum detection distance depending on what type of cable and power options chosen.

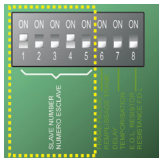
Version	MX 32 230Vac	MX 32 230Vac + Alarm Kit or RS485	MX 32 230Vac + Alarm Kit or RS485	MX 32 24Vdc +RS485 + Alarm Kit
TOTAL output available for the lines	1A (≤ 30°C) 650mA (≥ 40°C)	1A (≤ 30°C) 600mA (≥ 40°C)	1A (≤ 30°C) 550mA (≥ 40°C)	3A
OLCT 10N Tox	8 (≥1000m in 0,22mm²)			
OLCT 10N CO_2	8 (150m en 0,22mm², 400m in 0,5mm²)			
OLCT 10N LIE (100mA)	8 (150m in 0,5mm²) 6 (200m in 0,5mm²)	8 (150m in 0,5mm²) 5 (250m in 0,5mm²)	8 (150m in 0,5mm²)	

Q: Can we mix OLCT 10N CO and OLCT 10N methane on the same line of an MX43?

A: Yes. As it is a digital line, you can attach up to 32 detectors on the same line of a MX 43 and up to 8 when attached to a MX 32. Relay, analog input, logic input and analog output modules can all be connected on the same line as the OLCT 10N since they are all digital signals.

Q: How is the address of the OLCT 10N programmed?

A: Addresses are configured via dip switch on each detector.



Q: What should I do if one detector is the last module of the line?

A. Yes, switch no. 8 (see photo above) named EOL resistance (end of line resistor) must be placed in the ON position when the detector is the last module on the line.

Q: Does the OLCT 10N deliver an analog output?

A: No. The OLCT 10N is a digital transmitter.

Q: Should I calibrate once a sensor or a detector has been replaced?

A: After each change of sensor or detector, you will need to perform a manual calibration, followed by an automatic calibration. Both operations must be carried out..

Q: When the OLCT 10N is connected to the MX43 or MX32, can we calibrate several detectors at the same time?

A: Yes. When the OLCT 10N is connected to the MX43 or MX32, you can calibrate up to 32 detectors at once.

Q: What is needed to calibrate the OLCT 10N transmitter?

A: A calibration cap and magnet allow one-man, non-intrusive calibration. Simply place the magnet on the detector and a bicolour LED tracks the calibration process.

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