

## CTX 300

Transmitter



### Presentation

The CTX 300 can detect O<sub>2</sub>, CO<sub>2</sub>, toxic and refrigerant gases. TELEDYNE Gas & Flame Detection offers a detector version with a wide range of sensors (infrared, electrochemical, semiconductor) according to your application needs. It is also available with or without display.

### Simplicity

Sensor replacement does not require any special menu access. Just replace the sensor without even powering down the transmitter!

### Reduced maintenance

As the only consumable element, the CTX 300 sensor is easily replaceable. New sensors come pre-calibrated from the factory. So during the sensor ex-change, no calibration gas is required, nor adjustments to the detector, or remote central controller are required.

### Features

- Detection of toxic gases or oxygen
- Interchangeable and pre-calibrated sensor modules
- Local display (optional)
- Durable in harsh environments
- Up to 5 years of life for O<sub>2</sub> sensor

# CTX 300

## Transmitter

Gas	Part Number	Type of sensor	Range (ppm)	Operating temperature	Relative humidity uncondensed
O <sub>2</sub>	WC3 oO2F	Electrochemical	30.0 %	-20 °C to +50 °C	10 % to 95 % RH
	WC30O2G		30.0 %	-40 °C to +50 °C	10 % to 95 % RH
	WC3AO2G		30.0 %	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oO2S		100 %	+5 °C to +40 °C	10 % to 95 % RH
CO	WC3 oCOA	Electrochemical	100	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oCOB		300	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oCOC		1000	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oCOD		1.00 %	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oCOE		10.0 %	-20 °C to +50 °C	10 % to 95 % RH
CO <sub>2</sub>	WC3 oCO2A	Infrared	0.50% (5000ppm)	-40°C to +50°C	0 % to 95 % RH
	WC3 oCO2B		5.00 %	-40°C to +50°C	0 % to 95 % RH
	WC3 oCO2C		100 %	-40 °C to +50 °C	0 % to 95 % RH
H <sub>2</sub> S	WC3 oHSA	Electrochemical	30.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oHSB		100	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oHSC		1000	-20 °C to +50 °C	10 % to 95 % RH
NO	WC3 oNOA	Electrochemical	100	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oNOB		300	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oNOC		1000	-20 °C to +50 °C	10 % to 95 % RH
NO <sub>2</sub>	WC3 oN2A	Electrochemical	10.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oN2B		30.0	-20 °C to +50 °C	10 % to 95 % RH
SO <sub>2</sub>	WC3 oSOA	Electrochemical	10.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oSOB		30.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oSOC		100	-20 °C to +50 °C	10 % to 95 % RH
Cl <sub>2</sub>	WC3 oCL2	Electrochemical	10.0	-20 °C to +50 °C	10 % to 95 % RH
H <sub>2</sub>	WC3 oH2A	Electrochemical	2000	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oH2B		2 %	-20 °C to +50 °C	10 % to 95 % RH
HCl	WC3 oHLA	Electrochemical	30.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oHLB		100	-20 °C to +50 °C	10 % to 95 % RH
HCN	WC3 oHNA	Electrochemical	10.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3 oHNB		30.0	-20 °C to +50 °C	10 % to 95 % RH
NH <sub>3</sub>	WC3 oNH3	Electrochemical	100	-20 °C to +40 °C	10 % to 95 % RH
	WC30NH3F		100	-40 °C to +40 °C	10 % to 95 % RH
	WC3 oNH1		1000	-20 °C to +40 °C	10 % to 95 % RH
	WC30NH1F		1000	-40 °C to +40 °C	10 % to 95 % RH
	WC30NH2		5000	-20 °C to +40 °C	10 % to 95 % RH
ETO/PO	WC3 oOET	Electrochemical	30.0	-20 °C to +50 °C	10 % to 95 % RH
HF	WC3 oHFA	Electrochemical	10.0	-10 °C to +30 °C	10 % to 95 % RH
O <sub>3</sub>	WC3 oO3A	Electrochemical	1.00	-20 °C to +50 °C	10 % to 95 % RH
PH <sub>3</sub>	WC3 oPH3	Electrochemical	1.00	-20 °C to +50 °C	10 % to 95 % RH
ClO <sub>2</sub>	WC3 oCLO	Electrochemical	3.00	-20 °C to +50 °C	10 % to 95 % RH
COCl <sub>2</sub>	WC3 oCCL	Electrochemical	3.00	-20 °C to +40 °C	10 % to 95 % RH
Methylene chloride	CTX300-507	Semiconductor	500	-20 °C to +55 °C	10 % to 95 % RH
Methyl chloride	CTX300-508	Semiconductor	500	-20 °C to +60 °C	10 % to 95 % RH
Toluene	CTX300-652	Semiconductor	2000	-20 °C to +50 °C	10 % to 95 % RH
	CTX300-657		500	-20 °C to +50 °C	10 % to 95 % RH
Trichlorethylene	CTX300-655	Semiconductor	500	-20 °C to +60 °C	10 % to 95 % RH
Xylene	CTX300-653	Semiconductor	2000	-20 °C to +50 °C	10 % to 95 % RH
	CTX300-660		500	-20 °C to +55 °C	10 % to 95 % RH
Ethanol	CTX300-654	Semiconductor	5000	-20 °C to +60 °C	10 % to 95 % RH
	CTX300-656		500	-20 °C to +50 °C	10 % to 95 % RH
R12	CTX300-500	Semiconductor	10000	-20 °C to +55 °C	10 % to 95 % RH
R22	CTX300-501	Semiconductor	2000	-20 °C to +55 °C	10 % to 95 % RH
R123	CTX300-509	Semiconductor	2000	-20 °C to +55 °C	10 % to 95 % RH
R134a	CTX300-502	Semiconductor	2000	-20 °C to +55 °C	10 % to 95 % RH
R11	CTX300-505	Semiconductor	10000	-20 °C to +55 °C	10 % to 95 % RH
R23	CTX300-506	Semiconductor	10000	-20 °C to +55 °C	10 % to 95 % RH
R143a	CTX300-511	Semiconductor	2000	-20 °C to +55 °C	10 % to 95 % RH
R245fa	CTX300-521	Semiconductor	1000	-20 °C to +55 °C	10 % to 95 % RH
R404a	CTX300-512	Semiconductor	2000	-20 °C to +55 °C	10 % to 95 % RH
R507	CTX300-513	Semiconductor	2000	-20 °C to +55 °C	10 % to 95 % RH
R410a	CTX300-514	Semiconductor	1000	-20 °C to +55 °C	10 % to 95 % RH
R32	CTX300-515	Semiconductor	1000	-20 °C to +55 °C	10 % to 95 % RH
HFO-1234ze	CTX300-525	Semiconductor	1000	-20 °C to +55 °C	10 % to 95 % RH
HFO-1234yf	CTX300-662	Semiconductor	1000	-20 °C to +55 °C	10 % to 95 % RH

Part Number	Accuracy (% at PA full scale)	Life span (in months)	T(50) (seconds)
WC3 oO2F	+/- 1.5 %	28	10
WC30O2G	+/- 1.5 %	60	10
WC3AO2G	+/- 1.5 %	60	10
WC3 oO2S	+/- 1.5 %	36	< 20
WC3 oCOA	+/- 1.5 %	48	15
WC3 oCOB	+/- 1.5 %	48	15
WC3 oCOC	+/- 1.5 %	48	15
WC3 oCOD	+/- 1.5 %	48	< 20
WC3 oCOE	+/- 1.5 %	48	< 20
WC3 oCO2A	+/- 2 %	60	<20
WC3 oCO2B	+/- 2 %	60	<20
WC3 oCO2C	+/- 2 %	60	<20
WC3 oHSA	+/- 1.5 %	36	15
WC3 oHSB	+/- 1.5 %	36	15
WC3 oHSC	+/- 1.5 %	36	15
WC3 oNOA	+/- 1.5 %	36	15
WC3 oNOB	+/- 1.5 %	36	15
WC3 oNOC	+/- 1.5 %	36	15
WC3 oN2A	+/- 1.5 %	24	20
WC3 oN2B	+/- 1.5 %	24	20
WC3 oSOA	+/- 1.5 %	36	15
WC3 oSOB	+/- 1.5 %	36	15
WC3 oSOC	+/- 1.5 %	36	15
WC3 oCL2	+/- 1.5 %	24	50
WC3 oH2A	+/- 1.5 %	24	50
WC3 oH2B	+/- 1.5 %	24	50
WC3 oHLA	+/- 1.5 %	18	50
WC3 oHLB	+/- 1.5 %	18	50
WC3 oHNA	+/- 2 %	24	30
WC3 oHNB	+/- 2 %	24	30
WC3 oNH3	+/- 3 %	24	<20
WC30NH3F	+/- 3 %	24	<20
WC3 oNH1	+/- 3 %	24	<20
WC30NH1F	+/- 3 %	24	--
WC30NH2	+/- 3 %	24	<20
WC3 oOET	+/- 3 %	36	50
WC3 oHFA	+/- 3 %	12	50
WC3 oO3A	+/- 3 %	18	40
WC3 oPH3	+/- 3 %	12	40
WC3 oCLO	+/- 2 %	24	50
WC3 oCCL	+/- 1.5 %	18	50
CTX300-507		36	40
CTX300-508		36	40
CTX300-652		36	20
CTX300-657			
CTX300-655		36	40
CTX300-653		36	20
CTX300-660		36	20
CTX300-654		36	20
CTX300-656		36	20
CTX300-500		36	30
CTX300-501	+/- 15 % relative to alarm threshold	36	30
CTX300-509		36	30
CTX300-502		36	30
CTX300-505		36	30
CTX300-506		36	30
CTX300-511		36	30
CTX300-521		36	30
CTX300-512		36	30
CTX300-513		36	30
CTX300-514		36	20
CTX300-515	36	20	
CTX300-525	36	30	
CTX300-662		36	30



Pre-calibrated sensors ease maintenance

## Accessories



Gas collector



Calibration cup



Remote calibration cup



Mounting bracket



Bypass adapter

Ordering example for CTX 300 WC3oO2F:

-without display      Order WC3ØO2F

- with display        Order WC3AO2F

\* measures in ppm unless stated otherwise, If you have any questions about other gases or ranges, please consult us at [gasandflamedetection@scotssafety.com](mailto:gasandflamedetection@scotssafety.com)

Pressure : Atm +/- 10 %, IP 54

# CTX 300

## Transmitter

### Clear readability

- Highly sensitive, lighted display allows local reading
- Effective power-up indication by indicator lights
- Indication of maintenance or fault function by LED

### High-Level technology

- Pre-calibrated sensor avoiding the need to use unstable gases on site for calibration purposes
- High-performance semiconductor type detector (detection of freon gas, etc.)
- Available in an infrared version for CO<sub>2</sub>

### Advanced design


- Highly resistant to environmental elements
- Avoids having to use protective covers

### Heavy-duty

- Use of polycarbonate and stainless steel mounting hardware
- Resistant to corrosive agents (H<sub>2</sub>S, HCl, sea spray,...)
- Durable housing

### Specifically adapted options

- Removable filters, interchangeable without opening the housing (which is dust-proof, condensation-proof and water-resistant)
- Splash guard
- Gas collector cone
- Mounting brackets
- Pitot tubes, floats, heating protective device, etc.
- Remote calibration cup

Enclosure	Polycarbonate housing
Function	4-20 mA output analog transmitter
Display	Highly visible backlight LCD display unit (optional, gas dependent)
Indicator lights (3-wire version only)	In operation: green color Failure / maintenance: orange color
Wiring	2 wires shielded cable for CTX300 without display 3 wires shielded cable for CTX300 with display
Cable entry	PG9 cable gland (outer diameter 6 to 11 mm)
Power supply	15 to 32 V DC
Maximum Power Consumption	CTX 300 without display unit: 60 mA CTX 300 with display unit: 110 mA
Operating temperature	without display: -40°C to +50°C (-40°F to +122°F), sensor dependent with display: -20°C to +50°C (-4°F to +122°F), sensor dependent
Sealing	IP 54, NEMA 3 & 3R
Weight	520 g (18.2 oz)
Certification	EMC according to EN 50270:06 CSA  CLASS 812 86, CLASS 4812 06 (SIGNAL APPLIANCES) all versions except CQ versions
Impedance	32 ohms max loop for CTX 300 with display unit and for semiconductor sensor versions 64 ohms max loop for CTX 300 without display unit

