



## 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

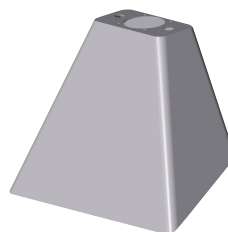
Gas	Part Number	Type of sensor	Range (ppm)	Operating temperature	Relative humidity uncondensed
O <sub>2</sub>	WC3oO2F	Electrochemical	30.0 %	-20 °C to +50 °C	10 % to 95 % RH
	WC30O2G		30.0 %	 -40 °C to +50 °C	10 % to 95 % RH
	WC3AO2G		30.0 %	-20 °C to +50 °C	10 % to 95 % RH
	WC3oO2S		100 %	+5 °C to +40 °C	10 % to 95 % RH
CO	WC3oCOA	Electrochemical	100	-20 °C to +50 °C	10 % to 95 % RH
	WC3oCOB		300	-20 °C to +50 °C	10 % to 95 % RH
	WC3oCOC		1000	-20 °C to +50 °C	10 % to 95 % RH
	WC3oCOD		1.00 %	-20 °C to +50 °C	10 % to 95 % RH
	WC3oCOE		10.0 %	-20 °C to +50 °C	10 % to 95 % RH
CO <sub>2</sub>	WC3oCO2A	Infrared	0.50% (5000ppm)	-40°C to +50°C	0 % to 95 % RH
	WC3oCO2B		5.00 %	 -40°C to +50°C	0 % to 95 % RH
	WC3oCO2C		100 %	-40 °C to +50 °C	0 % to 95 % RH
H <sub>2</sub> S	WC3oHSA	Electrochemical	30.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3oHSB		100	-20 °C to +50 °C	10 % to 95 % RH
	WC3oHSC		1000	-20 °C to +50 °C	10 % to 95 % RH
NO	WC3oNOA	Electrochemical	100	-20 °C to +50 °C	10 % to 95 % RH
	WC3oNOB		300	-20 °C to +50 °C	10 % to 95 % RH
	WC3oNOC		1000	-20 °C to +50 °C	10 % to 95 % RH
NO <sub>2</sub>	WC3oN2A	Electrochemical	10.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3oN2B		30.0	-20 °C to +50 °C	10 % to 95 % RH
SO <sub>2</sub>	WC3oSOA	Electrochemical	10.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3oSOB		30.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3oSOC		100	-20 °C to +50 °C	10 % to 95 % RH
Cl <sub>2</sub>	WC3oCL2	Electrochemical	10.0	-20 °C to +50 °C	10 % to 95 % RH
H <sub>2</sub>	WC3oH2A	Electrochemical	2000	-20 °C to +50 °C	10 % to 95 % RH
	WC3oH2B		2 %	-20 °C to +50 °C	10 % to 95 % RH
HCl	WC3oHLA	Electrochemical	30.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3oHLB		100	-20 °C to +50 °C	10 % to 95 % RH
HCN	WC3oHNA	Electrochemical	10.0	-20 °C to +50 °C	10 % to 95 % RH
	WC3oHNB		30.0	-20 °C to +50 °C	10 % to 95 % RH
NH <sub>3</sub>	WC3oNH3	Electrochemical	100	-20 °C to +40 °C	10 % to 95 % RH
	WC30NH3F		100	 -40 °C to +40 °C	10 % to 95 % RH
	WC3oNH1		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	WC3oOET	Electrochemical	30.0	-20 °C to +50 °C	10 % to 95 % RH
HF	WC3oHFA	Electrochemical	10.0	-10 °C to +30 °C	10 % to 95 % RH
O <sub>3</sub>	WC3oO3A	Electrochemical	1.00	-20 °C to +50 °C	10 % to 95 % RH
PH <sub>3</sub>	WC3oPH3	Electrochemical	1.00	-20 °C to +50 °C	10 % to 95 % RH
ClO <sub>2</sub>	WC3oCLO	Electrochemical	3.00	-20 °C to +50 °C	10 % to 95 % RH
COCl <sub>2</sub>	WC3oCCL	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	Semiconductor	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)
WC3oO2F	+/- 1.5 %	28	10
WC30O2G	+/- 1.5 %	60	10
WC3AO2G	+/- 1.5 %	60	10
WC3oO2S	+/- 1.5 %	36	< 20
WC3oCOA	+/- 1.5 %	48	15
WC3oCOB	+/- 1.5 %	48	15
WC3oCOC	+/- 1.5 %	48	15
WC3oCOD	+/- 1.5 %	48	< 20
WC3oCOE	+/- 1.5 %	48	< 20
WC3oCO2A	+/- 2 %	60	<20
WC3oCO2B	+/- 2 %	60	<20
WC3oCO2C	+/- 2 %	60	<20
WC3oHSA	+/- 1.5 %	36	15
WC3oHSB	+/- 1.5 %	36	15
WC3oHSC	+/- 1.5 %	36	15
WC3oNOA	+/- 1.5 %	36	15
WC3oNOB	+/- 1.5 %	36	15
WC3oNOC	+/- 1.5 %	36	15
WC3oN2A	+/- 1.5 %	24	20
WC3oN2B	+/- 1.5 %	24	20
WC3oSOA	+/- 1.5 %	36	15
WC3oSOB	+/- 1.5 %	36	15
WC3oSOC	+/- 1.5 %	36	15
WC3oCL2	+/- 1.5 %	24	50
WC3oH2A	+/- 1.5 %	24	50
WC3oH2B	+/- 1.5 %	24	50
WC3oHLA	+/- 1.5 %	18	50
WC3oHLB	+/- 1.5 %	18	50
WC3oHNA	+/- 2 %	24	30
WC3oHNB	+/- 2 %	24	30
WC3oNH3	+/- 3 %	24	<20
WC30NH3F	+/- 3 %	24	<20
WC3oNH1	+/- 3 %	24	<20
WC30NH1F	+/- 3 %	24	--
WC30NH2	+/- 3 %	24	<20
WC3oOET	+/- 3 %	36	50
WC3oHFA	+/- 3 %	12	50
WC3oO3A	+/- 3 %	18	40
WC3oPH3	+/- 3 %	12	40
WC3oCLO	+/- 2 %	24	50
WC3oCCL	+/- 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

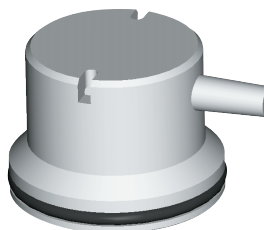


Pre-calibrated sensors ease maintenance

### Accessories



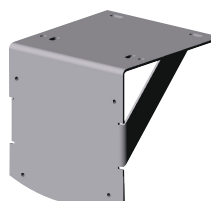
Gas collector



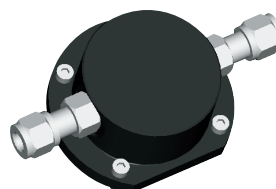
Calibration cup



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

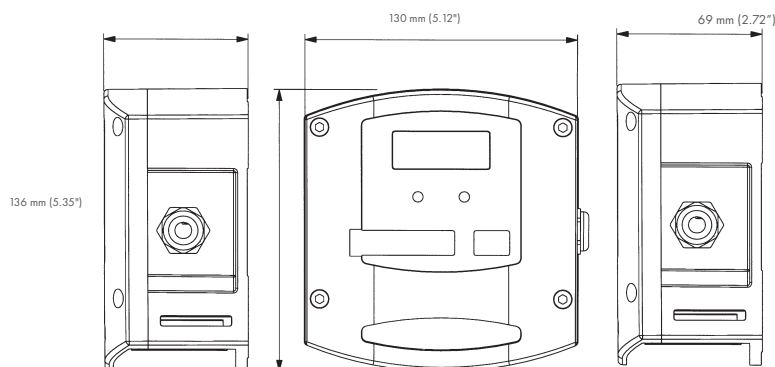
## Heavy-duty

- 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

<b>Enclosure</b>	Polycarbonate housing
<b>Function</b>	4-20 mA output analog transmitter
<b>Display</b>	Highly visible backlight LCD display unit (optional, gas dependent)
<b>Indicator lights (3-wire version only)</b>	In operation: green color Failure / maintenance: orange color
<b>Wiring</b>	2 wires shielded cable for CTX300 without display 3 wires shielded cable for CTX300 with display
<b>Cable entry</b>	PG9 cable gland (outer diameter $\phi$ to 11 mm)
<b>Power supply</b>	15 to 32 V DC
<b>Maximum Power Consumption</b>	CTX 300 without display unit: 60 mA CTX 300 with display unit: 110 mA CTX 300 without display semiconductor versions: 100mA
<b>Operating temperature</b>	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
<b>Sealing</b>	IP 54, NEMA 3 & 3R
<b>Weight</b>	520 g (18.2 oz)
<b>Certification</b>	EMC according to EN 50270:06 CSA  us CLASS 812 86, CLASS 4812 06 (SIGNAL APPLIANCES) all versions except CO <sub>2</sub> versions
<b>Impedance</b>	32 ohms max loop for CTX 300 with display unit and for semiconductors sensor versions 64 ohms max loop for CTX 300 without display unit



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