

PRODUCT BROCHURE

LPDT2

Ultra-Compact, Loop-Powered
Aluminum Oxide Sensor Transmitter

NEW

NEW



No display version



Standard version with display

Reliable and Fast

Cost-Effective

Low Maintenance

- Monitoring and control of air dryers
- Plastic dryers
- Glove boxes
- Welding gases
- Clean room environments

COSA Xentaur's LPDT2 is an **ultra-compact, loop-powered dew point transmitter** available with or without a display. The LPDT2 offers users even more control and options for customized dew point monitoring. Features include:

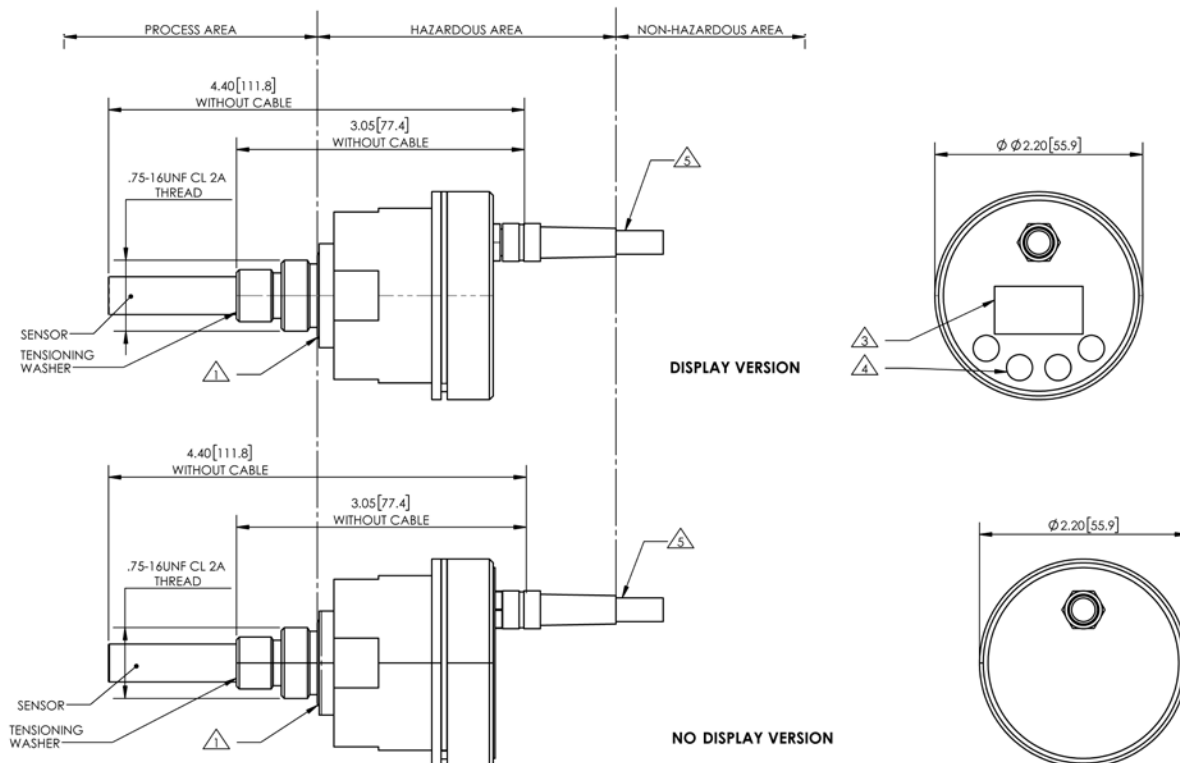
- Loop Powered, with 4-20mA analog output
 - Data Logging outputs via MODBUS 485
 - User Selectable Settings for units of measure
 - 3 Field Adjustment options
 - NEMA 4 IP66 Housing
 - Display unit can be rotated to read upright
 - Optional CL 1 Div 2 area rating (**coming soon**)
 - Low cost of ownership and maintenance
- **LPDT2 with display** features a miniature custom LCD display with new four pushbutton control enabling users to view, select, and set options at the transmitter.
 - **LPDT2 No Display** is a blind transmitter providing the measurement reliability users expect from COSA Xentaur HTF aluminum oxide sensors, without the additional expense of on-board transmitter control.

Configurations

- LPDT2-100 – general purpose and CL1 Div 2
- LPDT2-ND100 – general purpose and CL1 Div 2
- LPDT2-65 – general purpose and CL1 Div 2
- LPDT2-ND65 – general purpose and CL1 Div 2

Applications

- Glove boxes
- Clean room environments
- Natural gas transmission
- Hydrocarbon processing
- Air dryers and compressors
- Specialty air gases
- Cryogenic
- Air generators



Selectable User Settings may be controlled via an Optional Controller/Display mounted in the transmitter. See chart below for available settings and control levels for both transmitter options.

Settings	LPDT	LPDT2 No Display (Modbus Controlled)	LPDT2 Display Controlled
Select Units of Measure for output reading (°C, °F, ppmV, lbs , g/m3)	Yes	No	Yes
Display up to two Alternating Units of Measure	Yes	No	Yes
Lock and Unlock settings	Yes	No	Yes
Single Point Calibration, with a known gas value	No	No	Yes NEW
Span Check Calibration	Yes	No	Yes
Offset Adjustment	No	YES NEW	YES NEW
Show Sensor Data (transmitter and sensor Serial number)	Yes	Yes	Yes
Test the 4-20mA out put	Yes	Yes	Yes
Customize the Scale on 4-20mA output	Yes	Yes	Yes
Rotating Front Panel	Yes	Yes	Yes

TECHNICAL SPECIFICATIONS

Dew Point Sensor Element	
Type:	Hyper-Thin-Film high capacitance Al ₂ O ₃ dew point range, XTR-100 -100°C to +20°C (-148°F to +68°F), XTR-65 -65°C to +20°C (-85°F to +68°F)
Capacitance:	15nF to 200nF
Accuracy:	±3°C (± 5.5°F) for -100°C to +20°C dew point
Repeatability:	±0.5°C (±0.9°F)
Operating Temperature range:	-10°C to +70°C (+14°F to +158°F)
Sample Flow Range (linear vel. @ 1 atm.):	Static to 100 m/s
Storage Temperature:	-40°C to +80°C (-40°F to +176°F)
Calibration Method:	NIST/NPL traceable, multipoint calibration; single point and span check (display unit)
Electronics	
Input resolution:	0.1°C (dp)
Indicators:	3.5 digit LCD with custom legends on display unit
Engineering units:	°C, °F, ppmv, LBS H ₂ O/mm scf, gm H ₂ O/M ³ with display; cton no display
Controls:	4 push buttons, all settings stored in EPROM
Output:	Analog 4-20mA; 2 wire modbus 485 interface
Isolation:	Sensor and case are isolated from the current loop and shunted with 33V transorbs
Mechanical	
Enclosure:	Stainless steel IP64 enclosure
Pressure operating range:	340 bar (5,000 PSI)
Electrical connections:	Device: Molex 1200905081, 5 pin male connector Mate: Molex 1200860192, 5 pin female connector
Cable:	5 conductor cables, 12ft cable provided, can configure for 2 wire system
Power Requirements:	10 to 33 VDC, the instrument draws 4-20mA depending on measurement dew point
Warranty:	One year

GAIN REAL-TIME INSIGHT INTO YOUR PROCESS

Process Insights manufactures and delivers premium sensors, monitors, detectors, analyzers, instrumentation, and software that are mission-critical to keep your operations, personnel, and the environment safe – every day across the globe.

Get the most reliable, precision analytical technologies available on the market today. We will work to match your needs and budget, and provide the optimal, and most stable process analysis solution for your application.

CENTERS OF EXCELLENCE | PROVIDING PROVEN SOLUTIONS

Process Insights is committed to solving our customers' most complex analytical, process, and measurement challenges everyday.

Process Insights The Americas

4140 World Houston Parkway
Suite 180
Houston, TX 77032
USA
+1 713 947 9591

Process Insights EMEA

ATRICOM
Lyoner Strasse 15
60528 Frankfurt
Germany
+49 69 20436910

Process Insights APAC

Wujiang Economic and Technology
Development Zone
No. 258 Yi He Road
215200 Suzhou
Jiangsu Province, China
+86 400 086 0106

For a complete range of products, applications, systems, and service options, please contact us at:
info@process-insights.com

For a complete list of sales & manufacturing sites, please visit:
<https://www.process-insights.com/about-us/locations/>

COSA Xentaur is a trademark of Process Insights, Inc. All other marks are property of their respective owners.

REVOLUTIONIZING MEASUREMENT

EVERYWHERE