

# CTM™

CONTROL. TRACE. MONITOR.

## MULTI-CHANNEL MOISTURE MONITOR



Designed for demanding process control applications. Standard features include a full 6-backlit displays with bar graph, on-screen custom engineering units, and maximum/minimum display capabilities.

### Features

- 4 to 6 multi-channel monitoring outputs
- 4-20 mA Input
- 5 Digit LCD, 0.6" (15.2 mm) high
- 2 V Drop (5.7 V with backlight)
- Custom Engineering Units & Bar Graph
- FM Type 4X, IP65 Front
- Linear, Square Root, or Programmable Exponent
- Loop-Powered Backlight Standard
- Maximum & Minimum Display
- NEMA 4X Enclosure
- Operating Temperature Range -30 to 65°C
- Shallow Depth Case 3.2" Behind Panel
- HART Protocol Transparent
- Backlight display comes standard

### Applications

- Petrochemical
- Industrial gas
- Furnace gas/heat treating
- Natural gas production and processing
- Hydrogen production, storage, and transportation
- LNG production processing/receiving terminals
- Offshore export pipeline natural gas
- Transmission pipeline monitoring
- Power generation
- Air dryer
- Pharmaceuticals

### Easy Installation

Use inside or outside, in all climates, our monitors can be installed just about anywhere. The small footprint, loop-powered backlight, and wide temperature range are all standard features for easy use and low maintenance.

### User Menu

The set up is an easy process. Functions not needed for most applications are under the "Advanced Features" menu. Press and hold the Menu button for five seconds to access the advanced features of the meter.

Designed for permanent installations and works with the COSA NEW LPDT2, LPDT, and HDT Series dew point transmitters.





## DISPLAY

- 5 Digits, 0.6" High
- Bar graph
- Custom Engineering Units
- Engineering Notation
- Standard Backlight
- Trend Arrow





# Hyper Thin-Film™ Al<sub>2</sub>O<sub>3</sub> Moisture Sensor Technology Advantage

Our NEW LPDT2, LPDT, and HDT Series dew point transmitters use our COSA Xentaur Hyper-Thin-Film™ (HTF) high capacitance aluminum oxide sensor with a measuring range of -100°C to +20°C (-148°F to +68°F) (dp). The COSA Xentaur HTF sensors provide a degree of accuracy, speed of response and stability unavailable from instruments using conventional aluminum oxide or polymer sensors.

## SPECIFICATIONS: MULTI-CHANNEL MOISTURE MONITOR

**Display:** 5 digit LCD (-99999 to 99999), 0.60" (15.2 mm) high, 7-segment, automatic lead zero blanking

**Engineering Units:** 0.25" (6.4 mm) high, 14-segment

**Bar Graph:** 20-segment, 0-100% indication

**Trend Arrows:** Up and down trend indication

**Backlight:** Bright orange LED (intensity varies with signal)

**Front Panel:** FM Type 4X, IP65; panel gasket provided

**Display Update Rate:** 2.5/second

**Over Range:** Display flashes 99999

**Under Range:** Display flashes -99999

**Programming Method:** Four front panel buttons

**Noise Filter:** Programmable from 1 to 199

**Recalibration:** Recommended at least every 12 months

**Max/Min Display:** Max/min readings reached by the process are stored until reset by the user or until power to the meter is turned off

**Password:** Programmable password restricts modification of programmed settings **Non-Volatile**

**Memory:** All programmed settings are stored in non-volatile memory for a minimum of ten years if power is lost

**Voltage Drop:** 2.0 V max w/o backlight, 5.7 V max with backlight.

**Equivalent Resistance:** 100 Ω @ 20 mA without backlight, 285 Ω @ 20 mA with backlight

**Normal Mode Rejection:** 64 dB at 50/60 Hz

**Operating Temperature Range:** -30 to 65°C

**Allowable Temperature Range:** -40 to 65°C; below -30°C the LCD becomes less readable

**Storage Temperature Range:** -40 to 85°C

**Relative Humidity:** 0 to 90% non-condensing

**Connections:** Screw terminals accept 12 to 22 AWG wire

## INPUT

**Input Range:** 4-20 mA

**Accuracy:** ±0.03% of span ±1 count, square root and programmable exponent: 10-100% FS

**Calibration:** Scale without signal or calibrate with signal source

**Calibration Range:** User programmable over entire range of meter

**Minimum Span:** 0.40 mA between input 1 and input 2 - an error message will appear if input 1 and input 2 signals are too close together

**Input Overload:** Over current protection to 2 A maximum

**Decimal Point:** Up to 4 places (d.dddd, dd.ddd, ddd.dd, dddd.d, or ddddd)

**Function:** Linear, square root, or programmable exponent

**Low-Flow Cutoff:** -99999 to 99999 (-99999 disables cut-off function)

**Temperature Drift:** 50 PPM/°C from -40 to 65°C ambient



## 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.

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## CENTERS OF EXCELLENCE | PROVIDING PROVEN SOLUTIONS

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

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For a complete range of products, applications, systems, and service options, please contact us at:  
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REVOLUTIONIZING MEASUREMENT

**EVERYWHERE**