

AMI
ADVANCED MICRO INSTRUMENTS

MODEL 3010B **X**
TRACE H₂S

DEPENDABLE H₂S MEASUREMENTS MADE INCREDIBLY EASY

The **MODEL 3010BX** is AMI's neXt generation Trace H₂S Analyzer. Its patented technologies and superior design make the Analyzer the top pick among engineers and measurement technicians seeking reliable and accurate H₂S measurements in harsh conditions.

SUPERIOR PERFORMANCE

AMI's patented ELIMINATOR CELL BLOCK™ combines all the critical sample handling components, including a flow meter, metering valve, 3-way gas control valve, sensor pocket and pressure sensor, into one solid cross drilled block. This means the gas sample only needs to travel 4 inches to reach the sensor, ensuring a fast accurate measurement while keeping the Analyzer in a compact and robust footprint.

DESIGNED FOR THE USER

Front-loading H₂S sensor, intuitive controls and compact size are all design features that make installation and maintenance of the **MODEL 3010BX** the easiest of any Trace H₂S Analyzer in its class.

FULL SUITE OF STANDARD FEATURES

AMI's **MODEL 3010BX** comes standard with advanced features, including dual independent alarms, comprehensive alarm logic (fail safe or non-fail safe, latching or non-latching and independent alarm delays), alarm bypass and 3 levels of security settings. Automatic data logging provides detailed time-stamped records of H₂S measurement, gas pressure, temperature, supply voltage and power brown-out history.

UNMATCHED VALUE

The unique design of the **MODEL 3010BX** keeps cost low while offering unmatched features and easily handling some of the most difficult H₂S measurement requirements.

COMMON APPLICATIONS

- ▶ NATURAL GAS
- ▶ BIOGAS
- ▶ WASTEWATER



MODEL 3010B

PHYSICAL & ELECTRICAL SPECIFICATIONS

WEIGHT	MOUNTING	GAS CONNECTIONS	WETTED PARTS
16.0 lbs (7.26 kg)	Wall Mount or 2.0" Pipe	¼" 316 S.S. compression fittings	316 S.S. fittings, electro-less nickel-plated cell block, gold-plated contacts, acrylic flow meter & O-rings (Viton, kalrez, and Buna-N)
POWER			
DC		AC	
10 – 24 VDC, 150 mA max (non-heated)		100 – 240 VAC, 150 mA max (non-heated)	
10 – 24 VDC, 2.2 amps max (heated)		100 – 240 VAC, 550 mA max (heated)	




Note: 2-year Warranty for Parts & Labor for any defects in materials or workmanship. 1-year Warranty for H₂S sensors

OPERATIONAL SPECIFICATIONS

OUTPUT RANGES (USER SELECTABLE)		AMBIENT OPERATIONAL TEMPERATURE			FLOW RATE (RECOMMENDED)	INLET GAS PRESSURE	OPERATIONAL ALTITUDE	
STANDARD RANGES	OPTIONAL HIGH RANGE SENSOR	NON-HEATED	HEATED	HEATED WITH EXTREME WEATHER ENCLOSURE			DC	AC
0 – 10 ppm 0 – 50 ppm 0 – 100 ppm 0 – 200 ppm	0 – 100 ppm 0 – 500 ppm 0 – 1000 ppm 0 – 2000 ppm	25°F to 115°F (–3.9°C to 46°C)	–20°F to 115°F (–29°C to 46°C)	–40°F to 115°F (–40°C to 46°C)	1.0 to 1.5 SCFH (0.5 – 0.75 Lpm)	0.5 – 150 psig (0.03 – 10.3 bar)	≤ 5,500 m (18,000 ft)	≤ 2,500 m (8,200 ft)

SENSOR & ANALYZER PERFORMANCE SPECIFICATIONS

LOW RANGE SENSOR	HIGH RANGE SENSOR	90% FULL SCALE RESPONSE TIMES @ 1.5 SCFH (0.75 Lpm) FOR SPECIFIC RANGES		REPEATABILITY	ACCURACY	APPROVALS
Max Range 0 – 200 ppm	Max Range 0 – 2000 ppm	<120 sec for 0 – 100 ppm	<120 sec for 0 – 2000 ppm	±1% of range or ±0.2 ppm of H ₂ S, whichever is greater	±1.5% of full scale range at constant conditions	Class I, Division 1, Groups B, C, D, T4 Class I Zone 0/1, AEx ia/db IIB+H2 T4 Ga/Gb IECEX: Ex ia IIB+H2 T4 Ga/Ex db IIB+H2 T4 Gb UKCA/PESO: Ex ia/db IIB+H2 T4 Ga/Gb ATEX:  II 1/2 G Ex ia/db IIB+H2T4 Ga/Gb Ingressed Protection: IP65

RESPONSE TO OTHER GASES IN THE SAMPLE GAS (GIVEN THAT 100 PPM OF THE LISTED GAS IS PRESENT)

Methyl Mercaptan (40 ppm) Carbon monoxide (4 ppm) Hydrogen (1 ppm) Sulfur dioxide (18 ppm)

Note: For complete list, contact AMI

ANALYZER KEY FEATURES

ELIMINATOR CELL BLOCK™	Contains a Complete Sample System with all components, including the flow meter, metering valve, pressure sensor and 3-way Selection (Sample/Span/Off) Valve, fully integrated
ALARMS	2 fully adjustable concentration alarms with configurable Alarm logic and Relay Contacts, featuring: <div> <div>▶ Alarm Bypass</div> <div>▶ Alarm Delays</div> <div>▶ Trigger Above or Below Setpoint</div> <div>▶ Latching/Non-latching</div> <div>▶ Failsafe/Non-failsafe</div> <div>▶ Open or Close on Alarm</div> </div>
INTERNAL PRESSURE SENSOR	Measures gas inlet pressure from 0 – 150 psig
ANALOG OUTPUTS	1 – 5 VDC and 4 – 20mA isolated output signals and Modbus bi-directional RS485 communication
COMMAND CENTER	Software that works across AMI's Analyzers and gives users access to advanced functions: <div> <div>▶ Error Status Display</div> <div>▶ Data Logger (records H₂S measurements, temperature, psig, and power)</div> <div>▶ Alarm Configurations</div> <div>▶ Calibration Details</div> </div>
ACCESSORIES	<div> <div>▶ Demister</div> <div>▶ LRP</div> <div>▶ Extreme Weather Enclosure</div> </div>