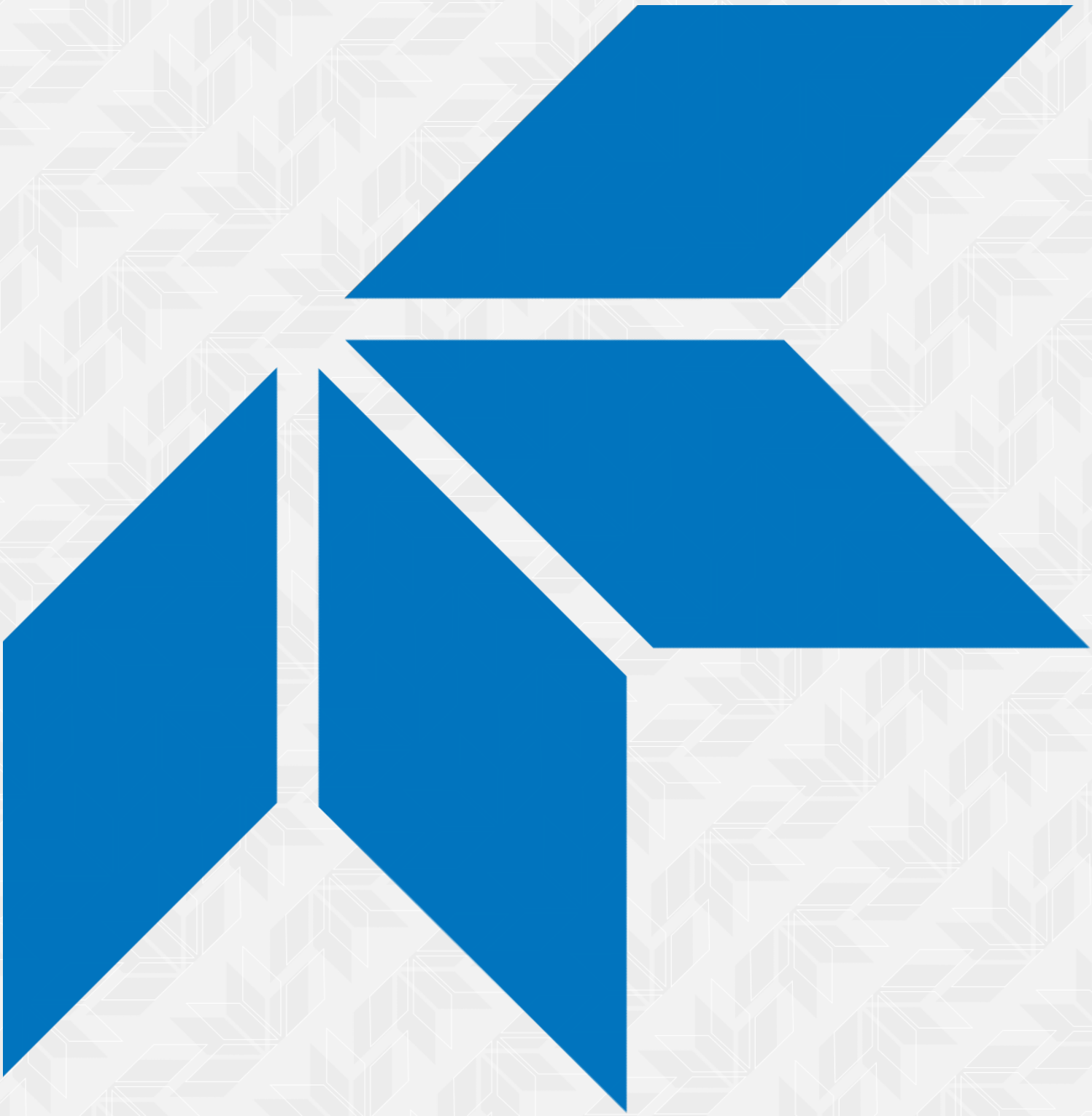
Product Catalog



TELEDYNE | Analytical Instruments

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Carbon Dioxide Systems

Carbon Dioxide Quality Control (CDQC) System

The CDQC system offers an integrated package to continuously monitor impurities in carbon dioxide (CO_2). The front door windows allow for the viewing of all analyzer displays, flow and pressure settings. The plug-and-play design allows for the user to select only the gases and features of interest to maximize cost benefit and space.

Gas Chromatographs

Model 4040

Model 4040 is a microprocessor based, oven heated methane/non-methane gas analyzer designed for high accuracy, sensitivity and stability. It is designed to measure varieties of hydrocarbon concentrations from a sampling point for process, efficiency and ambient monitoring applications.

Model 4060

The Model 4060 is a microprocessor based instrument ideal for the specific monitoring of trace levels of benzene in gases such as carbon dioxide, air and nitrogen. Designed as an online analyzer in a 19" rack, the 4060 comes with three standard ranges, the most sensitive at 100 ppb full-scale. This analyzer can be configured to measure acetladehyde or BTX for food/beverage and ambient applications.

Hydrocarbon Analyzers

Model 4020

The Model 4020 uses a field-proven flame ionization detector (FID) to measure total hydrocarbons (THC) in various streams and is ideal for monitoring hydrocarbon contamination in high purity bulk gases. When coupled with Teledyne's unique separation column, the 4020 is also diverse enough to be applied in hazardous locations for detection of volatile hydrocarbons in cooling water for process leak detection and environmental compliance.

Model 4030

Model 4030 uses a field proven flame ionization detector (FID) in a heated chamber to measure the quantity of hydrocarbons present in a heated sample gas. This chamber is heated to a high temperature in order to meet US EPA requirements for VOC emissions monitoring.

Infrared Analyzers

Model GFC-700X Series

The GFC series of gas filter correlation analyzers measure low ranges of gases by comparing infrared energy absorbed by a sample to that absorbed by a reference according to Beer-Lambert Law. Models are available for CO, CO_2 and N_2O gas detection.

Model	Gas Analyzed
GFC-7000T	Carbon Dioxide (CO_2)
GFC-7001T	Carbon Monoxide (CO)
GFC-7002T	Nitrous Oxide (N_2O)

Model 7500ZA/7600ZA

The Model 7500ZA/7600ZA non-dispersive infrared (NDIR) analyzer is capable of detecting up to four chosen, individual IR absorbing components on a continuous basis. Conveniently packaged in a 19" rack mount, the analyzer can also be supplied with an oxygen sensor, providing the operator with space saving five-in-one, cost-effective design.

Moisture Analyzers

Model 8800 Series

The 8800 Series uses field proven aluminum oxide (Al_2O_3) sensing technology to accurately detect trace moisture on either a continuous or spot checking basis. All Al_2O_3 sensors share the same basic operating principle: the capacitance measured between the sensor's aluminum core and gold film deposited on the oxide layer varies with the water content.

8800A/8800B

8800P

8800T

Nitrogen Analyzers

Model 2120XL

The Model 2120XL provides continuous and accurate nitrogen measurements using field proven emission spectroscopic technology. The non-consuming sensing technology requires no regular maintenance or replacement intervals, providing ultra-low detectability without the maintenance overhead of similar high performance systems.

Model 9110T / Model 9110TH

Models 9110T and 9110TH use a proven chemiluminescence detection principle, coupled with state-of-the-art microprocessor technology, to provide the sensitivity, stability and ease of use needed for ambient or dilution CEM requirements for monitoring levels of oxides in nitrogen.

Oxygen Analyzers

Model 3000MA / Model 3000MB

The Model 3000MA and 3000MB paramagnetic oxygen analyzers are versatile, microprocessor based instruments specifically designed to detect oxygen in a variety of gases. Drawing on the solid performance of the highly successful 3000 series control platform, these provide the user with a variety of features and options to satisfy virtually any application.

Model 3000PA / Model 3000PB

Models 3000PA and 3000PB bring percent oxygen analysis to new heights of precision. Using advanced microprocessor technology, these instruments make the task of percent oxygen analysis easier, faster and more accurate than ever before. Simple menu choices, membrane command switches and a large LED display make set up and operation clear and quick.

Model 3000TA / Model 3000TA-XL / Model 3000TB

Models 3000TA, 3000TA-XL and 3000TB make the task of trace oxygen analysis easier, faster and more precise than ever before. The high accuracy and fast response of these instruments is only surpassed by its ability to calibrate without the assistance of support gases. Simple menu choices, membrane command switches and large LED display make set up and operation clear and quick.

3000MA 3000MB 3000PA 3000PB 3000TA 3000TAXL 3000TB

Oxygen Analyzers (cont.)

Model 3000RS Series

The 3000RS Series represent the next generation of online percent and trace oxygen analyzers. They are designed with improved precision, sensitivity and accuracy of their predecessor, modern electronics and an updated graphic user interface, all packaged into a compact, elegant chassis.

Model 3010C Series

The 3010 series of oxygen analyzers are versatile microprocessor based instruments for detecting oxygen in a variety of background gases. It is a "split architecture" instrument which means that a general purpose control unit, designed for non-hazardous areas only, can remotely control a specially designed analysis unit or probe that can operate in a hazardous area.

3010PAC/3010TAC **3010PBC/3010TBC**

Model 3010MA

The 3010MA paramagnetic percent oxygen analyzer is a versatile, microprocessor based instrument specifically designed for oxygen purity analysis. Drawing on the solid performance of Teledyne's 3000 Series control platform, the 3010MA provides the user with a wide variety of features while maintaining cost effectiveness.

Model 3190 / Model 3290

The Model 3190 and 3290 analyzers prove that good things come in small packages. This microprocessor based unit offers high accuracy, easy use and all the standard features demanded by the end-user in a compact, budget priced design. The membrane command switches and large, four digit LED display make set up and operation clear and quick.

Oxygen Analyzers (cont.)

Model 3020 Series

The 3020 series analyzers are versatile, microprocessor based instruments specifically designed to detect oxygen in a variety of gases. It is a precise, cost effective instrument capable of measuring oxygen at a variety of ranges. Drawing on the solid performance of the 3000 series control platform, the 3020 series provides the user with a variety of features and options to satisfy virtually any application.

3020M 3020P 3020T

Model 3110 Series

The 3010 series represents the new generation of portable trace and percent oxygen analysis capabilities. It combines a rugged, portable analyzer with the high reliability of trace and percent level sensors. This ensures highly accurate ppm and percent oxygen readings in a variety of background gases. In addition, the microprocessor based electronics provide accurate, high resolution readings and easy-to-use features.

Model 3350

The 3350 is a microprocessor based oxygen alarm monitor that accurately measures the concentration of oxygen in control rooms, closed atmospheres, critical breathing circuits and other applications that require the fail-safe monitoring of breathable, ambient air.

Model 9060Z

The 9060Z zirconium oxide oxygen analyzer provides in-situ analysis capability which can accept signals from up to two zirconia probes for averaging or back up purposes in furnaces, kilns and boilers. This unit is housed within a compact, steel, easily installed gasket enclosure suitable for wall mounting. Purged or explosion proof design enclosures rated for hazardous areas can also be supplied.

Oxygen Analyzers (cont.)

Model InstaTrans-XD

The Model InstaTrans-XD oxygen digital transmitter is a versatile instrument for measuring oxygen content in a gas sample. The fully upgraded microprocessor based platform gives a more compact, single PCB design to simplify maintenance and reduce shelf spares.

Sulfur Analyzers

Model 6200T

The 6200T total sulfur analyzer utilizes proven UV fluorescent technology to continuously detect sulfur found in inert gas streams. An internal, quartz catalytic converter is employed to convert the sulfur, when mixed with scrubbed ambient air, into SO_2 via higher temperature oxidation. An internal vacuum pump is employed to draw both the sample and the ambient air into the converter. The converted sample gas is then fed to the fluorescence chamber where it is then exposed to ultraviolet radiation.

Model 6400T Series

The 6400T analyzer uses a proven UV fluorescence principle coupled with state-of-the-art microprocessor technology to provide accurate and dependable measurements of low level SO_2. The 6400T-H_2S measures hydrogen sulfide (H_2S) by incorporating a catalytic converter to oxidize H_2S into SO_2 while leaving other, more difficult to oxidize, sulfurs unconverted.

Model 6400TSG

The 6400TSG series utilizes our field-proven ultraviolet (UV) fluorescence technology to continuously monitor the total sulfur content found in process gas and liquid feeds. UV Fluorescence is a non-consuming method of detection that eliminates the hassles associated with replacing tape cartridges and enables detection as low as 10 ppb, depending on the application, with stable, reproductive results.

Thermal Conductivity Analyzers

Model 2000 Series

The 2000 series represents a complete line of thermal conductivity detector (TCD) based analyzers which can be applied in a wide range of applications and industries. By using field proven filament-based and semiconductor TC detectors, Teledyne is able to continuously monitor hydrogen and a variety of other gases of interest in either binary or multi-component sample gas streams.

2000A 2000B

Model 2000RS

The Model 2000RS represents the next generation of thermal conductivity detector based online process gas analyzers. They are not only designed with improved precision, sensitivity and accuracy; but, also include modern electronics and an updated graphic user interface, all packaged into a compact, elegant chassis.

Model 2000XTC

The Model 2000XTC transmitter resets the standard for thermal conductivity detector based applications with the process control industry. As an intrinsically safe transmitter, packaged within a rugged, weatherproof housing, this unit is suitable for use in harsh, hazardous outdoor environments. Using a novel, solid-state thermal conductivity sensor, this cost effective transmitter can be configured to detect a variety of gases of interest in binary or multi-component sample gas mixtures.

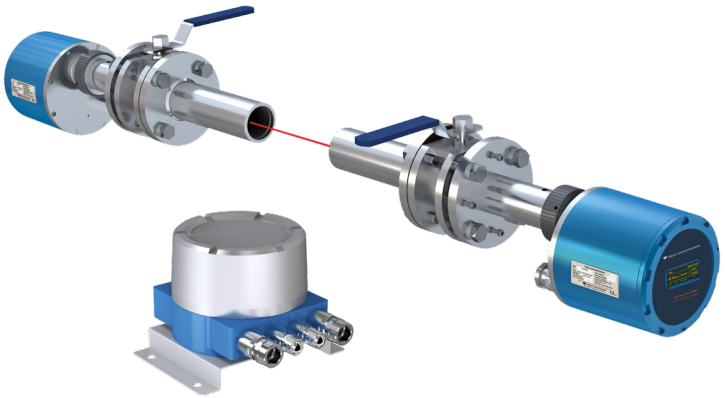
Model 2020

The Model 2020 thermal conductivity analyzer is a versatile microprocessor based instrument for measuring a component gas in a background gas, or in a specific mixture of background gases. It compares the thermal conductivity of a sample stream with that of a reference gas of known composition. It is preprogrammed with automatic linearization algorithms for a large number of gases and gas mixtures.

Tunable Diode Laser Analyzers

Model LGA-4000Z

The LGA-4000Z series leverages the latest in tunable diode laser absorption spectroscopy (TDLAS) to achieve an ultra-fast gas measurement in-line without resorting to extraction and sample conditioning. By tuning the laser to a specific absorption wavelength, based on the gas of interest, the attenuation of the light through a sample cell and the detector can be correlated to the concentration of each gas, per Beer-Lambert Law. The laser provides a narrow absorption band which minimizes the effect of interfering compounds in the process.



Model LXT330

The LXT330 liquid transmitter is a single or dual channel, universal, multi-parameter transmitter designed for continuous online liquid measurements. It can be paired with SP3 smart sensors and is intended for use in non-hazardous, general purpose rated industrial environments. The sensor platform covers a wide range of liquid analytical measurements, such as pH, ORP, Specific Ion (pION), dissolved oxygen, free chlorine, total chlorine, conductivity, resistivity and turbidity.

Model LXT380

The LXT380 universal transmitter is a single or dual channel, multi-parameter designed for the online continuous measurement of pH, ORP, Specific Ion p(ION), dissolved oxygen, free chlorine, total chlorine, conductivity and resistivity. The transmitter digitally communicates with the SP3X digital sensor, automatically configuring the transmitter's menus and display screens to the measured parameter.

SP3 & SP3X Series

The SP3 and SP3X smart sensors can be configured for many liquid measurements by selecting among many flexible types of sensors such as:

- Amperometry style sensor cartridges for pH, pION or ORP
- Galvanic style sensor cartridge for ppm or ppb dissolved oxygen
- Polarographic sensor for free chlorine, total chlorine and chlorine dioxide
- Conductive style sensor for contacting conductivity, inductive (toroidal) conductivity or resistivity
- Optical sensors: optically activated dissolved oxygen, turbidity & total suspended solids

Alkalinity Analyzers

Model 6800T

The 6800T series analyzers are a family of online sequential sampling analyzers that use various automated analytical technologies to perform an analysis. When configured for alkalinity measurements, titration technology is used for the most cost effective, ease of use and low maintenance method.

Chlorine Analyzers

Model CDA330 / FCA330 / TCA330

The Model CDA330, FCA330 and TCA330 chlorine analyzers are panel mounted and ready to use for free chlorine, total chlorine and chlorine dioxide analysis. It is designed to monitor chlorine in drinking water, rinse water, cooling water and other fresh water samples. It features a plug and play design that incorporates a flow control device, a pH sensor, a chlorine sensor and the LXT330 controller conveniently mounted on a PVC panel.

Colorimeters

Model CA600

The Model CA600 is an online sequential sampling analyzer that uses colorimetric methods and can be configured to most laboratory colorimetric tests in individual processes. This unit typically makes a single measurement per analysis cycle, although a user defined calibration or cleaning sequence can be added to proceed the measurement every "X" number of measurement cycles.

Hydrocarbon / Oil in Water Analyzers

Model 4080

The Model 4080 total hydrocarbon in water analyzer is designed to detect hydrocarbons (C_1-C_9+) which may not absorb in the UV region. This unit employs the same basic architecture and electronics as the 4020 along with a stripper to measure total hydrocarbons in an aqueous sample.

Model 6650SP

The Model 6650SP oil in water analyzer is comprised of a versatile transmitter and probe for monitoring oil in water in various refineries, power plants and offshore platforms. The system incorporates state-of-the-art electronics and a fiber optic based in-situ probe that detects the oil in water.

Total Organic Carbon Analyzers

Model 6700E

The 6700E total organic carbon (TOC) analyzer employs proven UV-persulfate methodology to isolate only organic carbons, oxidize them into carbon dioxide and measure TOC in the gas phase using IR absorption technology.

Water Cut / BS&W Analyzers

Model 5650

Model 5650 water cut monitor is designed to produce superior results in operating environments from the North Sea to the Sahara Desert. Delivering unmatched flexibility in material, size, features and configurations, the 5650 can be integrated into almost any oil carrying system. Built-in logic compensates for vast temperature effects in the dielectric constant of the water while remaining sensitive to the much smaller dielectric constant effects of oil.

Sensors

Teledyne's patented micro-fuel cells (MFC) are a unique, electrochemical transducer that provides versatile oxygen sensing capability for various applications.

Sensor Type	Class	Part Number	Learn More
Oxygen Sensors	A-2C	C06689-A2C	
	A-2CXL	B74033-A2CXL	
	A-5	C06689-A5	
	B-1	C06689-B1	
	B-1C	C06689-B1C	
	B-2C	C06689-B2C	
	B-2CXL	C06689-B2CXL	
	B-3	C06689-B3	
	E-2	C57283-E2	
	InstaTrace	B71875	
	InstaTrace-CO2	B73016	
	InstaTrace-XL	B73592	
	L-2C	C06689-L2C	
Automotive Sensors	R-17A	C43690-R17A	
	R-21A	C43981-R21A	
	R-22A	C44611-R22A	
Medical Sensors	R-17MED	C43690-R17MED	
	R-22MED	C44611-R22MED	
	UFO-130-2	C73894	

Founded in 1946 as Research Instrument Corporation, a division of Applied Physics, the company was renamed Analytic Systems when acquired by United Electro Dynamics in 1957. In 1964, Teledyne, Inc. acquired United Electro Dynamics, and Analytic Systems group became Teledyne Analytical Instruments (TAI).

Since then, TAI experienced an merger in 1993 with an aerospace technology leader, Teledyne Brown Engineering out of Huntsville, Alabama, and was briefly known as Teledyne Brown Engineering Analytical Instruments. Early in 1996, the company became a business unit of Teledyne Electronic Technologies, changing the company name to its present designation of Teledyne Analytical Instruments.

Teledyne Analytical Instruments (TAI) is a world leader in the design and manufacturing of high quality gas and liquid analyzers with product lines that include: electrochemical sensors, analyzers and custom systems which combine expertise in electronics, chemistry and engineering. Our products and services cover many industries including: air separation/bulk industrial gas manufacturing, chemical and petrochemical processing, cement, metals and metal processing, oil and gas, medical/pharmaceutical, nuclear, power generation, pulp and paper, safety, semiconductor/electronics, and steel.

With over 50 years of experience, TAI's mission is to meet the industry's varied requirements for gas and liquid analysis. In addition, detailed attention to our customers' needs and dedication to the highest standards of performance and quality are just some of our top priorities. These standards are enhanced by our ISO 9001:2015 certification.

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ISO 9001:2015 CERTIFICATION ™
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