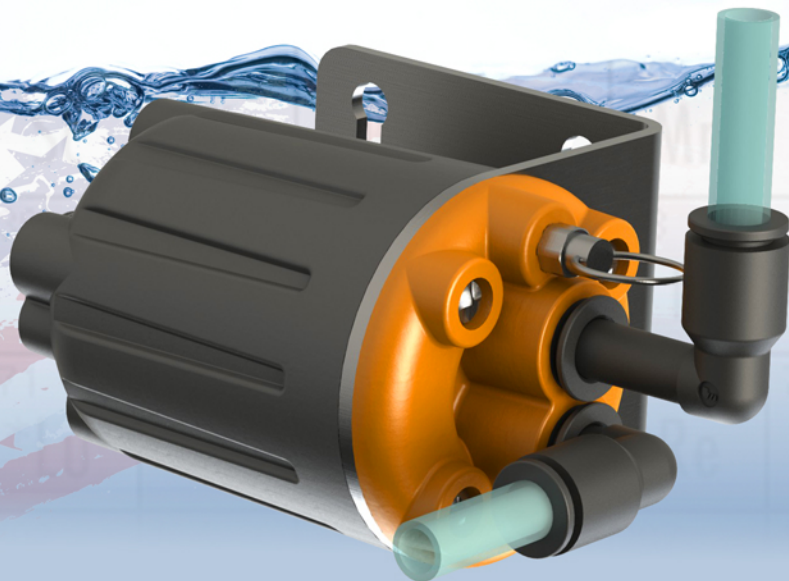




IRISTM inline

REFRACTIVE INDEX SENSOR

Concentration Measurement Made Simple

The new MISCO IRIS and IRIS+ Inline Sensors are completely self-contained measurement systems and represent a new standard in concentration sensing. The modular design includes a flow-through adapter with two push-to-connect I/O ports and an integrated mounting bracket. A detachable "smart-sensor" can be removed from the adapter without tools, for cleaning or maintenance, with just a quarter-turn.

Smart-Sensor Technology...

Unlike conventional inline or process refractometers, the IRIS Inline Sensors are true "smart-sensors" that operate independent of an external control box and communicate directly with your data acquisition or process control instrumentation. IRIS sensors can measure refractive index, temperature correct the reading, convert refractive index into a more user-friendly unit of measure, and then transmit the results in the blink of an eye.

Simple Communications...

Each IRIS sensor is equipped with options that allow it to communicate with the outside world. The entry level IRIS sensor provides user-selectable 4 to 20 mA or 0 to 10 Volt analog communications, while the IRIS+ sensor can be configured for analog communications or optional RS232 serial digital communications, using ASCII text. All IRIS sensors can be configured and calibrated, via the USB port on a Windows® computer, through MISCO Inline ConnectTM software.

Simple Installation...

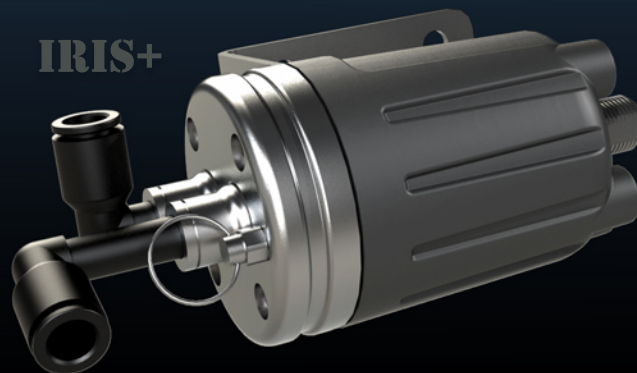
As the name implies, most inline refractometers are mounted "inline" with a main process stream. Inline mounting frequently requires special, often expensive, custom adapters and the entire process must be shutdown to remove the sensing head for cleaning or maintenance. The IRIS Inline Sensor is easily connected to a by-pass stream, running alongside the main process, using common off-the-shelf hardware.

Instead of the sensor forcing you to adapt your process to the sensor, the MISCO IRIS Sensors are easily integrated into your process. Two push-to-connect I/O ports, on the face of the flow through adapter, make it easy to connect the IRIS sensor to nearly any type of process. These 5/16" (8mm) ports can accommodate a nearly unlimited number of common inexpensive off-the-shelf connectors and adapters. Whether you run steel tubing, flexible tubing, hose, or pipe, there is probably a quick push-to-connect adapter to meet your needs.

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IRIS



IRIS+



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	IRIS	IRIS+	VIP ₂
Range (Equivalence)*	1.3330 to 1.3900 nD20	1.3330 to 1.3900 nD20	1.3330 - 1.5000 nD20
Resolution (Equivalence)	0.0001 nD 0.1 Brix	0.0001 nD 0.1 Brix	0.0001 nD 0.05 Brix
Precision (Equivalence)	+/- 0.0005 nD +/- 0.3 Brix	+/- 0.0003 nD +/- 0.2 Brix	+/- 0.0001 nD +/- 0.05 Brix
Adapter Fittings	5/16" (8 mm) Push-to-Connect	5/16" (8 mm) Push-to-Connect	2" Tri-Clamp
1,024 Element Detector Array	✓	✓	✓
LED Light Source @ 589.3 nm	✓	✓	✓
Sapphire Optic Material	✓	✓	✓
Sample Area Material	Polymer/Stainless Steel	316L Stainless Steel	Passivated 316L Stainless Steel
Body Material	Polymer	Polymer	Passivated 316L Stainless Steel
Auto Temperature Correction	✓	✓	✓
Temperature Range	41 to 104 °F (5 to 40 °C)	32 to 125 °F (0 to 52 °C)	-4 to 212 °F (-20 to 100 °C)
Pressure Range	0 to 36 psi (0 to 2.5 Bar)	0 to 50 psi (0 to 3.4 bar)	0 to 300 psi (0 to 20.68 bar)
Power Source	12 to 24 VDC	5 to 24 VDC	5 to 24 VDC
Dimensions	2" Dia. x 3.5" Long (5 cm x 8.9 cm)	2" Dia. x 3.5" Long (5 cm x 8.9 cm)	2.40" L x 2.52" Max. Dia. (61 mm x 64.1 mm)
Weight	11.5 oz. (0.33 kg)	1 lbs. (.45 kg)	1 lbs. (.45 kg)
Two User Calibration Points	✓	✓	✓
IP68 Protection Class	✓	✓	✓
Seals - Standard **	Viton & Buna-N	Kalrez	Fluorosilicone
USB Computer Interface	✓	✓	✓
4 to 20 mA Analog Option	✓	✓	✓
0 to 10 Volt Analog Option	✓	✓	✓
RS232 Digital Output Option		✓	✓
Made in the USA	✓	✓	✓