

# Signet 2610 Process Optical Dissolved Oxygen Sensor **+GF+**



The Signet 2610 RDO® Pro is a rugged, reliable sensor designed to deliver accurate dissolved oxygen (DO) data across a wide measuring range while reducing maintenance costs. It features the latest optical technology for DO measurement and eliminates the replacement of membrane and reference solutions.

The Signet 2610 optical sensor cap is calibrated at the factory and requires no field calibration. The optical measurement technology resists abrasion and bleaching allowing for a long life in many harsh applications. The DO sensor has a built in Modbus RS485 and 4 to 20 mA current loop outputs for ease of interface to existing control systems. The 3-2610-41 version includes the Signet (S³L) digital interface for direct connection with the 9900 SmartPro™ Transmitter and 8900 Multi-Parameter Controller. Additional features include a 10 m (32.8 ft) cable with stripped and tinned ends as well as a titanium thermistor for improved compatibility in salt water applications.

## Features

- Optical DO measurement no flow requirements
- Rugged construction
- Calibration built into the measurement cap 2% of range 0 to 20 mg/l
- One year measurement cap life
- No membranes or filling solutions
- Flexible communications  
4 to 20 mA or Modbus 3-2610-31 (S³L), 4 to 20 mA or Modbus 3-2610-41
- Measurement Range: 0 to 20 mg/L
- 3-2610-41 compatible with 9900 SmartPro Transmitter and 8900 Multi-Parameter Controller
- 3-2610-31 compatible with 9900 SmartPro Transmitter and 8900 Multi-Parameter Controller with use of iGo device



## Applications

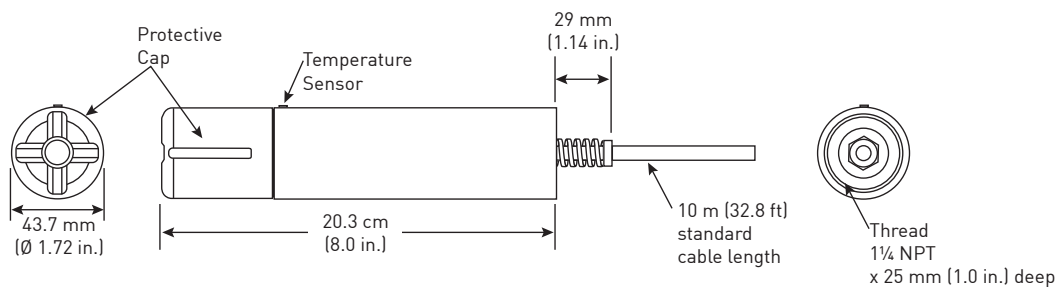
- Municipal and Industrial Wastewater Treatment
- Drinking Water Reservoir Monitoring
- Environmental Water Discharge Monitoring
- Aquatic Life Support

System Overview	<b>Panel Mount</b> Signet Instruments 8900 9900 	<b>Field Mount - Pipe, Tank, Wall</b> Signet Instruments 9900 with 3-8050 Universal Mount Kit 	<b>Panel Mount</b> Signet Instruments 8900 9900 	<b>Field Mount - Pipe, Tank, Wall</b> Signet Instruments 9900 with 3-8050 Universal Mount Kit 	<b>In-line Installation</b> Signet Pipe Adapter 3-2610.501 
	Signet i-Go™ Signal Converter 8058 OR 				
	Signet 2610-31 Process Optical Dissolved Oxygen Sensor 		Signet 2610-41 Process Optical Dissolved Oxygen Sensor 		
		All sold separately		All sold separately	

## Specifications

General	
Sensor Type	Luminescent dissolved oxygen sensor
Transmitter/Local Display	Optional, not required. Compatible with 8900 and SmartPro instruments
Communications Options	Modbus (RS485), 4 to 20 mA 3-2610-31 and -41, (S <sup>3</sup> L) 3-2610-41
Maximum Cable Length	Up to 1219 m (4000 ft) (Modbus and 4 to 20 mA), 38 m (125 ft) (S <sup>3</sup> L)
Internal Mounting Thread	1¼ NPT
Power Requirements	12 to 24 VDC ±10% regulated
4 to 20 mA output span	0 to 20 mg/L
Performance	
Salinity Range	0 to 42 PSU, fixed or real-time capable
pH Range	2 to 10 pH
Barometric Range	507 to 1115 mbar, fixed or real-time capable
Maximum Pressure	300 psi
Range	0 to 20 mg/L concentration, 0 to 200% saturation
Accuracy (DO)	±0.1 mg/L, 0 to 8 mg/L, ±0.2 mg/L, 8 to 20 mg/L
Response Time of Cap	T90: 30 sec T95: 37 sec @ 25 °C
Repeatability	0.05 mg/L
Resolution	0.01 mg/L
Environmental	
Wetted Materials	ABS, Titanium and FPM
Usage Life of Cap	1 year from the first instrument reading
Shelf Life of Cap	24 months from date of manufacture (install within 12 mo. of manufacture)
Operating Temperature	0 °C to 50 °C      32 °F to 122 °F
IP Rating	IP-67 with cap off, IP-68 with cap installed
Compliance	Heavy industrial, IEC 61000-6-2:2005
Storage Conditions, Cap	1 °C to 60 °C      33 °F to 140 °F, in factory container
Storage Conditions, Sensor	-5 °C to 60 °C      23 °F to 140 °F
Warranty	
Sensor	3 years from date of manufacture
Standards and Approvals	
	CE, FCC
	RoHS Compliant, China RoHS

## Dimensions



## Ordering Information

Mfr. Part No.	Code	Description
3-2610-31	<b>159 001 753</b>	Optical Dissolved Oxygen Sensor (0 to 20 ppm) with Modbus, SDI, and 4 to 20 mA output
3-2610-41	<b>159 001 754</b>	Optical Dissolved Oxygen Sensor (0 to 20 ppm) with S <sup>3</sup> L, Modbus, and 4 to 20 mA output
3-2610.392	<b>159 310 122</b>	Replacement Optical Dissolved Oxygen Sensor Cap (0 to 20 ppm)
3-2610.501	<b>159 500 413</b>	Dissolved Oxygen Threaded Pipe Adapter