



ITT

Water & Wastewater

Royce Multi-Channel Water Process Analyzers



**SERIES 8000 MULTI-CHANNEL
WATER QUALITY ANALYZER**

The Royce Series 8000 Multi-Channel Water Process Analyzer line is made up of the first multi-channel instruments in the wastewater treatment industry capable of utilizing up to 4 different measurement sensors at one time. Designed for the need of dissolved oxygen and mixed liquor total suspended solids sensors in the same biological reactor, the Series 8000 Water Process Analyzer line will provide Operator convenience, responsible process management and economical pricing for the instrumentation and sensors required.

Utilizing the same components and workmanship that has become a hallmark for Royce instrumentation over the years, the Series 8000 Analyzers utilize all of the Royce dissolved oxygen and total Suspended solids sensors that are available. All sensors can be mixed, with up to 4 channels on each analyzer - two dissolved oxygen sensors with two total suspended solids sensors. Or, there is the ability to use only three sensors - two of one type of measurement and one of the other.

Engineered for life

FEATURES

- Up to four sensors per analyzer (2 dissolved oxygen and 2 total suspended solids)
- Up to two types of measurements per analyzer
- Microprocessor based electronics
- Electrochemical DO self-cleaning (8200 Series Only)
- Menu driven user interface
- Backlit, 4 line/20 character harsh environment display
- Four independently configurable relays
- Electronic self-diagnostics
- Isolated analog outputs
- Two digital outputs plus Modbus Communications
- Profibus DP (Optional)

THE MODEL NUMBERS & COMBINATIONS ARE AS FOLLOWS:

Model 8120

For one DO (not Model 96A) and one TSS sensor

Model 8130

For two DO (not Model 96A) and one TSS sensor or two TSS sensors and one DO sensor (not Model 96A)

Model 8140

For two DO (not Model 96A) and two TSS sensors

Model 8220

For one Model 96A DO sensor and one TSS sensor

Model 8230

For two Model 96A DO sensors and one TSS sensor or one Model 96A DO sensor and two TSS sensors

Model 8240

For two Model 96A DO sensors and two TSS sensors

NOTE: The Model 96A DO sensor is a Royce patented electrochemical self-cleaning DO sensor.

DISSOLVED OXYGEN SENSORS SPECIFICATIONS

Sensor Types:

Model 99 Disposable DO sensor
 Model 95A Rechargeable DO sensor
 Model 96A Rechargeable DO sensor

Dissolved Oxygen:

Ranges, 0 – 99 mg/l
 Resolution, 0.01 mg/l from 0 - 9.99
 0.1 mg/l from 10.0 - 99.0
 Accuracy, +/- 0.1 mg/l

Temperature:

0 – 50°C x 1°C or
 32 – 122°F x 1°F
 Accuracy, +/- 1% of reading

Stability:

.1 mg/l

TOTAL SUSPENDED SOLIDS SENSORS SPECIFICATIONS

Sensor Types:

Model 72A Low Range TSS sensor
 Model 73A Medium Range TSS sensor
 Model 74A High Range TSS sensor
 Model 76A Medium Range TSS sensor

Range Model 72A/72P:

10 – 1500 mg/l

Range Model 73B/73P:

300 – 30,000 mg/l, 0 – 3%

Range Model 74A:

800 – 80,000 mg/l, 0 – 8%

Range Model 76A:

300 – 30,000 mg/l, 0 – 3%

COMMON ANALYZER SPECIFICATIONS

Instrument Ambient Conditions:

-10 – 50°C
 Humidity, 0 to 100%

Input Power:

80 – 260 VAC, 50 – 60 Hz or 12 VDC

Outputs:

Four Isolated 4 – 20 mA per analyzer
 600 ohms maximum
 Four Relays with programmable hysteresis per analyzer
 10A resistive @ 250VAC
 RS-485 & Modbus (Standard)
 Profibus DP (Optional)

Readout Device:

Harsh environment, four line, 20 Character LCD digital display
 Backlit

Calibration:

Automatic, push-button for DO and In-Situ calibration
 to a known value for TSS.

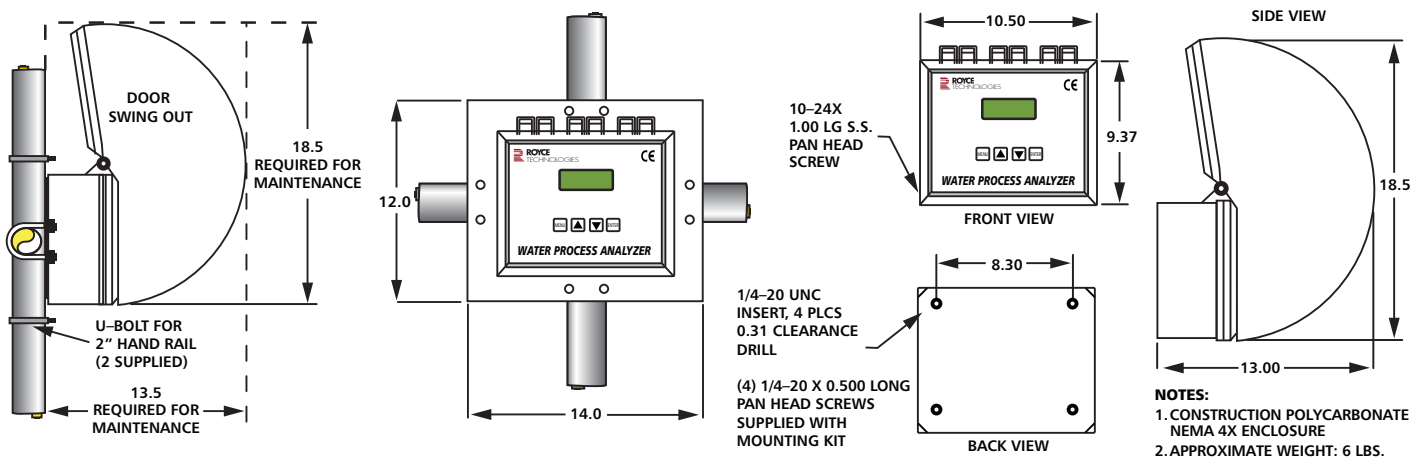
Enclosure:

NEMA 4X (IP65)

Weight:

5.5 lbs., 2.5 kg

SERIES 8000 ANALYZERS



CCPB00 (6/2009)

To find ITT Water & Wastewater products near you please visit: www.us.ittwww.com or www.roycetechnologies.com



ITT Water & Wastewater
 14125 So. Bridge Circle
 Charlotte, NC 28273

Toll Free: 800-347-3505
 Phone: 704-409-9898

Fax: 704-409-9899
 Email: royce@itt.com