



ITT

Water & Wastewater

Royce Suspended Solids Systems



**MODEL 7110/7120
SINGLE & DUAL CHANNEL ANALYZERS**

The Royce Model 7110 Single Channel Suspended Solids Analyzers provides reliable, continuous operation in waste treatment plants, rivers, lakes and other aqueous systems. This analyzer incorporates the same award winning technology found in all Royce Suspended Solids Systems. It has the capacity to provide the advanced features found in other Royce Models and incorporates the latest Modbus communications (Profibus DP is optional).

The Royce Model 7120 is a dual channel Suspended Solids analyzer that incorporates the same technological advances as the Model 7110. The Model 7120 reduces installation costs where multiple points need to be monitored. Again, award winning technology and advanced design combine to provide the user with dramatic, cost effective, easy to use Suspended Solids monitoring and control in a two channel analyzer.

FEATURES

- Automatic ranging
- Phased array source for automatic color compensation control (Model 73B)
- Simple to use insitu calibration
- Menu driven text help screens
- Automatic ambient light compensation
- Electronic self-diagnostics
- Digital communications with isolation and surge protection
- Isolated current or voltage outputs
- Two setpoint relays per channel

Engineered for life

MODEL 7110/7120 SUSPENDED SOLIDS ANALYZER

SPECIFICATIONS

Channels:

7110 is Single Channel
7120 is Dual Channel

Suspended Solids:

Range, 10 – 80,000 mg/l
Resolution, Sensor Dependent
Accuracy, Sensor Dependent

Instrument Ambient Conditions:

-10 to 50°C
Humidity, 0 to 100%

Input Power:

80 – 260 VAC, 50 – 60 Hz or 12 VDC

Outputs:

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

Readout Device:

Harsh environment, 4 line, 20 Character LCD digital display
Backlit

Calibration:

Automatic, push-button In-Situ calibration to a known value

Enclosure:

NEMA 4X (IP65)

Weight:

2.2 lbs., 1 kg

SENSORS & ADDITIONAL OPTIONS

MODEL 72A/72P

Low Range; Optical; Optional Air or Water Jet Cleaning

Range: 10 – 1500 mg/l

Construction: Molded Polyurethane

Temp: 0 – 50°C

Pressure: 0 – 50 PSIG

Light Compensation: Automatic Ambient Light Compensation

MODEL 73B/73P

Mid-Range; Color Compensated Optical; Optional Air or Water Jet Cleaning

Range: 300 - 30,000 mg/l, 0 - 3%

Construction: Molded Epoxy/PVC

Temp: 0 – 50°C

Pressure: 0 – 50 PSIG

Color Compensation: Automatic Color Compensation

MODEL 74A/76A

Model 74A High-Range; Model 76A Mid-Range; Optical;
Pipe Insertion; Optional Air or Water Jet Cleaning

Range:

Model 74A = 800 - 80,000 mg/l, 0 - 8%

Model 76A = 300 - 30,000 mg/l, 0 - 3%

Construction: Stainless Steel

Temp: 0 – 50°C

Pressure: 0 – 50 PSIG

Additional sensor models and mountings are available. Contact Royce Technologies for full sensor specification sheets.

Model 7110 and Model 7120 can use any of the Royce Series 70 TSS Sensors. Some examples are shown below.



MODEL 72A LOW RANGE SENSOR



MODEL 73B MID-RANGE SENSOR



MODEL 74A/76A HIGH RANGE INSERTION SENSOR

To find Royce products near you please visit: roycetechnologies.com

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