

# Conductivity Measurement



## Isco Orbit™ Conductivity Analyzer

The Isco Orbit Conductivity analyzer uses an electrodeless, inductive sensor that is virtually immune to fouling or clogging, ensuring reliable measurement in highly loaded wastewater. The PEEK molded sensor is highly chemical- and corrosion-resistant, and the measuring range of 5 micro-siemens/cm to 1000mS/cm covers all wastewater applications.

The Isco Orbit transmitter line uses identical, but parameter-specific electronics and a large number of interchangeable components. In wastewater treatment applications, this means simplified installation and operator training, quick and easy software upgrades, and straightforward troubleshooting and service.

Isco has configured standard analyzer packages and installation kits to make specification and ordering simple for common applications, in which the sensor is typically mounted in an open channel or basin with the transmitter close by. A full range of options is available on request, including panel-mount transmitters, kits for mounting sensors in closed pipes, additional relay outputs, and other application-specific requirements.



OLM 253 transmitter

## Standard features

- User selectable isolated 0-20 mA or 4-20 mA output and one alarm contact.
- Compact shock-proof sensor design
- Sensor installation in open channels, basins, or closed pipes
- No calibration needed

## Applications

- Conductivity measurement at WWTP transfer station and industrial influent
- Conductivity measurement of final effluent

## Options and Accessories

### Two or four relay outputs that can be programmed for

- High and Low Set points including temperature.
- P(ID) Control
- Timer for sensor cleaning
- 2nd current output for temperature

### The Plus package adds the following features.

- Automatic cleaning on alarm
- Live Check to monitor sensor response
- Programmable current output



OLS 50 sensor

## Isco Orbit Conductivity Analyzer Specifications

<b>Conductivity Transmitter OLM 253</b>	
Resolution	0.5% of Reading
Isolated Output	0-20 mA or 4-20 mA, 500 Ohms Load (Max.)
Alarms	Up to 4 dry Contacts, SPDT, NO or NC
Control Functions	P, PI, PD, PID for solenoid valves or frequency pumps
Power Supply	115 /230 Vac, 50/60 Hz or 24 Vac/dc
Automatic or Manual TC	Pt 100
Post/wall mount enclosure, H x W, x D:	9.7 x 6.7 x 4.5 inches (247 x 170 x 115 mm)
Enclosure rating	NEMA 4X (IP65)
Alternate enclosure	¼ DIN panel mount available
<b>Conductivity Sensor OLS 50</b>	
Type	Inductive
Cell Constant	2.0 / cm
Measuring Range	5.0 microsiemens/cm to 2000 mS/cm
Temperature Compensator	Pt 100
Process Connection	1.0 inch NPT
Maximum Temperature	125°C (257°F)
Maximum Pressure	20 bar (290 psi)
Environmental Rating	NEMA 6 (IP67)
Cable Length	5.0 or 10.0 M (16.4 or 32.8 ft.)
Wetted Materials	PEEK, Viton seals

### Ordering Information

Contact Isco for complete ordering details, including additional options and accessories.

Description	Part Number
Isco Orbit Conductivity Analyzer. Includes Post/wall mount Transmitter and OLS 50 conductivity sensor. Order installation hardware separately.	68-0040-006
Outdoor Mounting Kit. Complete package to mount 253 transmitter on horizontal or vertical post and immerse sensor in basin, tank or open channel. Includes weather protection shield.	68-0047-003



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