The **EC3050** and EC3055 belong to the latest series of instruments. These products are the result of more than 40 years of experience in the measurement and control of electric conductivity and total dissolved salts.

The sensors and submersible probes in our catalog allow the visualization of the temperature value as well, making the instruments suitable for any type of application and installation.

EC3055 is the left model and EC3050 is the right model.

Main features

EC scales related to the K of the cell
K=0.01   200.0/2000 nS - 20.00/200.0/2000 µS
K=0.1   2000 nS - 20.00/200.0/2000 µS - 20.00 mS
K=0.5   10.00/100.0/1000 µS - 10.00/100.0 mS
K=1   20.00/200.0/2000 µS - 20.00/200.0 mS
K=10   200.0/2000 µS - 20.00/200.0/2000 mS

TDS scales related to EC scales
100.0/1000 ppb
5.00/10.00/50.0/100.0/500/1000 ppm
5.00/10.00/50.0/100.0/1000 ppt

Resistivity scales related to EC scales
5.00÷999.99   0.500÷99.999   MΩ
50.0÷9999.9   5.00÷999.99   0.500÷99.999   kΩ
50.0÷9999.9   5.00÷999.99   0.500÷99.999 Ω

Temperature scales
-10.0 ÷ 110.0 °C, 14.0 ÷ 230.0 °F

Measuring units
%, ppt, ppm, ppb, g/l, mg/l, µg/l, Bè, custom (4 characters max)

Display
The multi-line graphic display shows the values of the measures and the messages which guide the user through set-up, configuration and during normal operation.

Keyboard
There are dedicated keys to directly access zero and sensitivity calibration as well as set point configuration.

Operating mode
The meters can operate in automatic, measure or simulated mode so to facilitate start-up or maintenance.

Two filters software
The user can set two filters in order to obtain a stable reading and a faster response to the variations of the measurement in the process.

Two analog outputs
Can be addressed to any input and programmable 0/4 – 20 mA on two points of the scale. They allow PID control or transmission of the measured values.

Two On/Off regulators
Independent and addressable to any input with programmable set point on the scale.

PID output
During PID control through the analog output, the level of the actuation is displayed.
The user can select an FM regulation (pulse frequency) or WM (pulse width) addressed to the assigned relay.

Alarm
The relay is dedicated to min/max values of the measures, the excessive activation of relays and the presence of the logic inputs.

Logic inputs
Two free voltage contacts can generate a hold or alarm condition.

Autocleaning
A relay is dedicated to an external device for the sensor self-cleaning. This function is fully programmable through the controllers' software.

Universal power supply
From 85 to 264 Vac, 50/60 Hz.
The low voltage option allows to power the unit from 9 to 36 Vdc or from 12 to 24 Vac, 50/60 Hz.

Easy installation
All EC3050 series of controllers have IP65 protection rating. They are suitable for wall mounting, or for DIN rail and handrail by means of optional accessories.
Series EC3055 has an IP65 front panel and it is designed for customers who prefer panel mounting.

Compatible and versatile
The analyzers are compatible with all our conductivity sensors.
The temperature measuring and compensation is done with Pt100 or Pt1000 two or three wires probes.

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EC3050 - EC3055

Applications

- Aquaculture
- Chemical industry
- Drinking water
- Electroplating
- Horticulture
- Food and beverage
- Paper and pulp
- Pharmaceutical
- Printing industry
- Swimming pools
- Textile industry
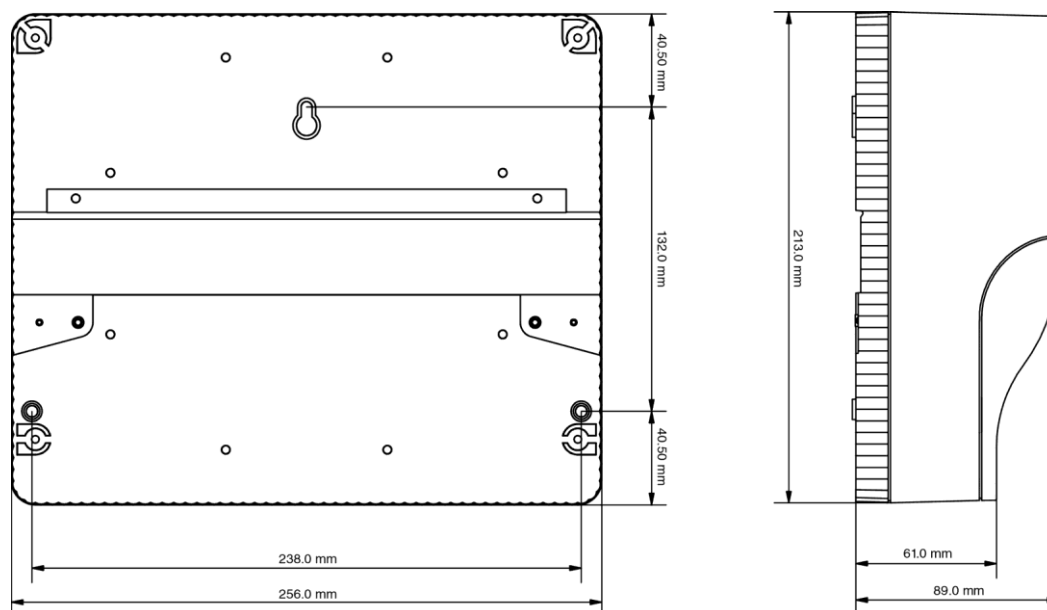- Underground water
- Water treatment

Technical specifications

Inputs:	2 electrodes cells
	4 electrodes cells (option)
	Pt100 o Pt1000
Zero:	± 10 %, ±5°C, ±9°F
Sensitivity:	60 ÷ 160 %
Resolution:	1/2000, 0.1 °C/°F
Accuracy:	0.2 %
Repeatability:	0.1 %
Non linearity:	0.1 %
Dual filter software:	0.4 ÷ 50.0 seconds for small and large variations
Dual analog output:	0-20 mA / 4-20 mA Rmax 600 Ω
Dual set points HI/LO:	ON/OFF – PID - PFM - PWM, SPST relays
Hysteresis:	0 ÷ 1 %
Delay:	0 ÷ 999.9 seconds
Alarm:	SPDT relay with delay 0 ÷ 100.0 seconds
Cleaning function:	off / autoclean / manual, relay SPDT
	repetition time 0.1 ÷ 100.0 hours
	cleaning time 1.0 ÷ 60.0 seconds
	holding time 0.0 ÷20.0 minutes
SPST and SPDT relay contacts:	220V - 5 A resistive load Operating temperature: -10 ÷ 60 °C
Humidity:	95% without condensation
Power supply:	85 ÷ 264Vac - 50/60 Hz
	9 ÷ 36Vdc, 12 ÷ 24Vac (option 091.42x)
Terminal blocks:	removable
Weight:	1360 g (EC3050)
	450 g (EC3055)
Enclosure:	ABS, IP 65 protection (EC3050)
	Metallic, IP 65 front panel only (EC3055)
Dimensions:	256x230x89 mm (EC3050)
	98x98x104 mm, 90x90x95 mm panel cutout (EC3055)
EMC/RFI conformity:	EN 61326
Registered design:	002564666-002 (EC3050)
	002564666-003 (EC3055)

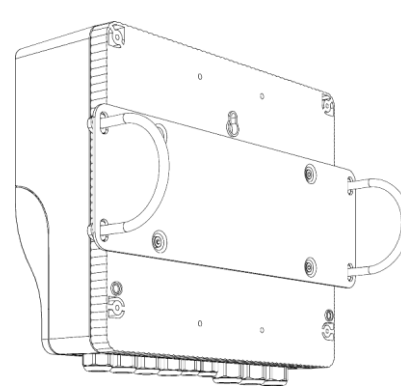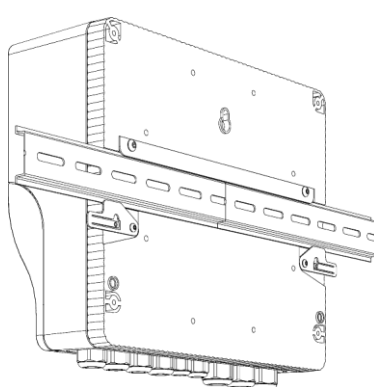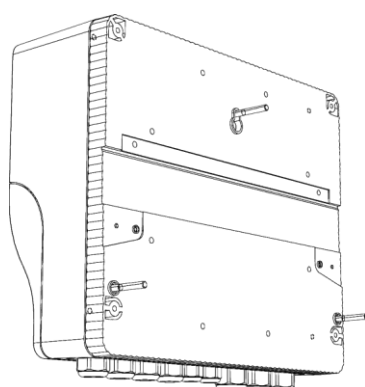The technical specifications could be changed without notice.

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Series EC3050 dimensions and installation

40.50 mm

132.0 mm

40.50 mm

213.0 mm

238.0 mm

256.0 mm

61.0 mm

89.0 mm

Wall

DIN rail

Handrail

Series EC3055 dimensions

98.0 mm

98.0 mm

>3s ZERO SENS SET1 SET2

MODE ∧ ∨ ENT

81.0 mm

95.0 mm

9.0 mm

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