



Bench meters

Simplify your conductivity analysis

Orion Lab Star EC112 conductivity bench meters

Measure conductivity, salinity or TDS using the Orion Lab Star EC112 Bench Meter.

Benefits

- Budget-friendly meter for simplified conductivity, salinity and TDS testing
- Large 5" backlit display makes viewing measurements easy
- Small meter footprint saves valuable lab bench space
- Date and time stamped logs support GLP compliance
- View active calibration logs with date and time to help ensure accuracy
- 500-point data log with date and time to track critical measurements
- Output data and calibration logs to a printer or computer for long-term data storage

The Thermo Scientific™ Orion™ Lab Star EC112 Conductivity Bench Meter is ideally suited for laboratories with users of varying levels of technical expertise and who require a simple-to-calibrate and use meter for routine conductivity, salinity and TDS testing. Scientists have trusted Thermo Scientific Orion Lab Products for over 60 years to provide them with accurate and reliable analytical testing instruments in the lab and in the field.

Measure conductivity, salinity or TDS simultaneously with temperature using the Orion Lab Star EC112 Conductivity Bench Meter. To enable comprehensive measurement capabilities, measure conductivity in a range of 0.00 $\mu\text{S}/\text{cm}$ to 500.0 mS/cm , measure salinity in a range of 0.00 to 80.0 ppt or 0.00 to 42.0 PSU, measure TDS in a range of 0.00 ppm to 500.0 ppt and measure temperature in a range of -5.0 to 105.0 °C or 23.0 to 221.0 °F.

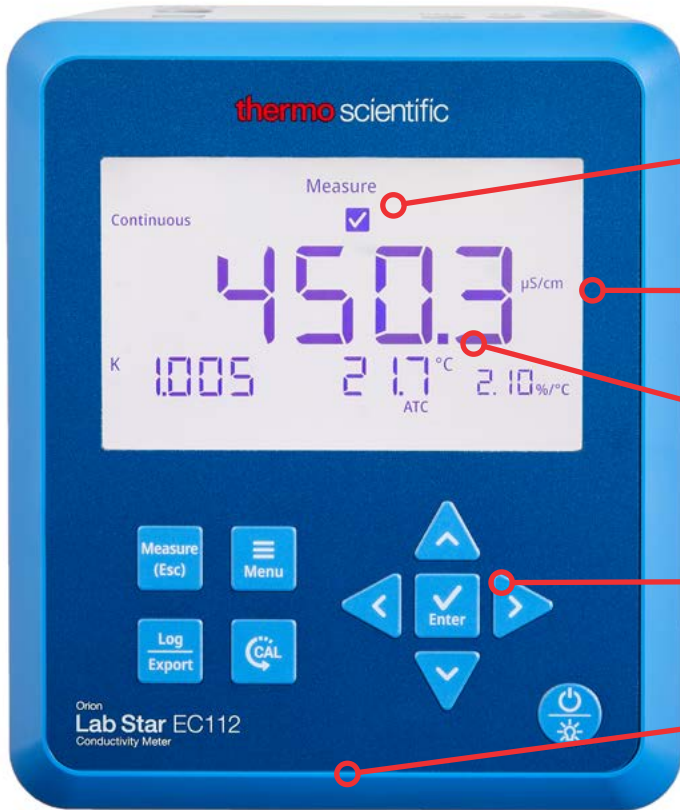
For proficient SOP compliance, perform one-to-five-point conductivity calibrations, one-point salinity calibrations, one-to-five-point TDS calibrations and one-point temperature adjustment calibrations.

Featuring a large, backlit display for easy viewability and small footprint to save bench space, this conductivity meter is an ideal option for simplified, budget-friendly lab testing. Use the onscreen stabilizing and ready indicators to help identify when conductivity meter, salinity meter and TDS meter readings are complete.

View active conductivity, salinity, TDS and temperature calibration logs with date and time stamp to enable accurate, reproducible measurements. Record key measurements using the 500-point data log with date and time stamp. Output data logs and calibration logs to a printer or computer for long-term data storage.

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Product feature highlights



Stabilizing and ready indicators identify when measurements are complete

Large 5" display with backlight to improve ease of viewing and recording measurements

Large primary conductivity, salinity or TDS measurement shown simultaneously with temperature measurements

Durable membrane keypad to support rugged lab use and disinfection needs

Small footprint to save bench space



IP-54 rated housing protects meter against spills, splashes and dust intrusion

Export data to computer or printer for long-term data storage

Twist-and-lock power adapter keeps power supply securely attached to meter

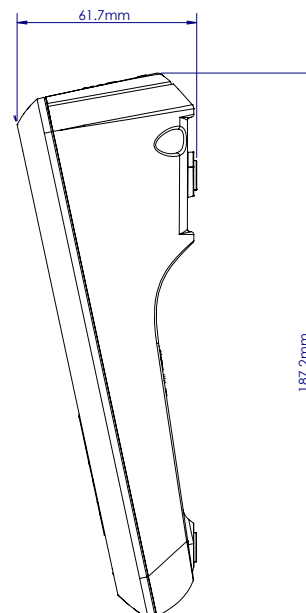
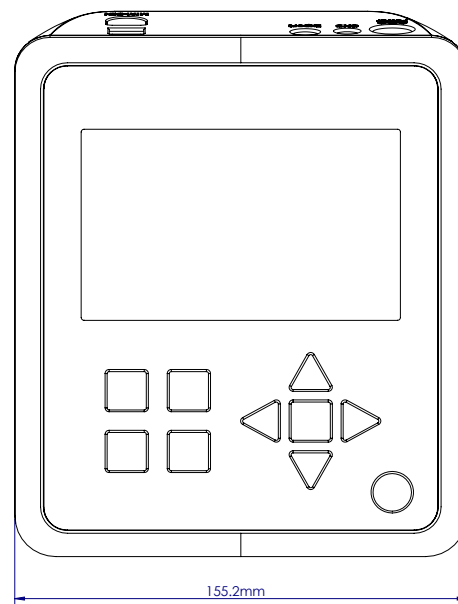
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Product specifications

Parameter	Description
Conductivity	
Range	0.00 $\mu\text{S/cm}$ to 500.0 mS/cm
Resolution	0.01, 0.1, 1 $\mu\text{S/cm}$; 0.01, 0.1 mS/cm
Relative accuracy	$\pm 0.5\%$ reading ± 1 LSD
Calibration points	1 to 5 points
Calibration method	Automatic standard recognition with manual entry option
Temperature compensation	Linear (0 to 10 $\%/^{\circ}\text{C}$) or off
Reference temperature	15.0, 20.0, 25.0 or 30.0 $^{\circ}\text{C}$
Salinity	
Range	0.00 to 80.0 ppt; 0.00 to 42.0 PSU
Resolution	0.01, 0.1 ppt; 0.01, 0.1 PSU
Relative accuracy	$\pm 0.5\%$ reading ± 1 LSD
Calibration points	1 point
Modes	Natural Seawater (ppt) or Practical Salinity (PSU)
TDS	
Range	0.00 ppm to 500.0 ppt (1.00 factor)
Resolution	0.01, 0.1, 1 ppm; 0.01, 0.1 ppt
Relative accuracy	$\pm 0.5\%$ reading ± 1 LSD
Calibration point	1 to 5 points
TDS factor	0.40 to 1.00
Temperature	
Range	-5.0 to 105.0 $^{\circ}\text{C}$, 23.0 to 221.0 $^{\circ}\text{F}$
Resolution	0.1 $^{\circ}\text{C}$, 0.1 $^{\circ}\text{F}$
Relative accuracy	$\pm 0.3^{\circ}\text{C}$, $\pm 0.5^{\circ}\text{F}$
Calibration points	1 point
Offset adjustment	Up to $\pm 5^{\circ}\text{C}$
Features	
Display	5" backlit LCD
Time and date	Yes
Time format	12 hour AM/PM or 24 hour
Date format	Selectable, DD-MM-YYYY or MM-DD-YYYY
Read types	Continuous, Auto-Read, Timed
Timed interval	5 seconds to 60 minutes
Data log	500 sets with time and date
Calibration log	Active conductivity, salinity, TDS, temperature with time and date
Calibration alarm	Yes, 1 to 168 hours or off
Sleep mode	Yes, optional
Self-test	Automatic with startup
Memory	Non-volatile
Input	8-pin MiniDIN
Data output	Computer or printer
Data output format	CSV or print
Warranty	3 years
Certifications	CE, cTUVus, FCC Class B, CES-001, KC, RCM
Enclosure	IP-54
Power	100-240 VAC, 50-60Hz, 9 DC adapter, 1.3A
Dimensions (L x W x H)	187.2 mm x 155.2 mm x 61.7 mm, 7.37" x 6.11" x 2.43"
Weight	700 grams, 1.54 lbs.

Parameter	Description
Environmental conditions	
Environmental conditions	Indoors
Altitude	Up to 2,000 Meters
Operating temperature	5 $^{\circ}\text{C}$ to 45 $^{\circ}\text{C}$
Operating relative humidity	5 to 85%, non-condensing
Storage temperature	-20 $^{\circ}\text{C}$ to 60 $^{\circ}\text{C}$
Storage relative humidity	5 to 85%, non-condensing
Mains fluctuation	$\pm 10\%$ of range (100-240VAC)
Installation category	II
Pollution degree	2
Protection class	III

Meter dimensions



Orion Lab Star Meter and Meter kit options

Select catalog number **LSTAR1120** for the conductivity meter and stand option, which allows you to purchase your conductivity electrode separately.

Select catalog number **LSTAR1125** for the standard conductivity meter kit option, for a wide variety of conductivity samples in the 1 μ S/cm to 20 mS/cm range.



Ordering Information

Description	Cat. No.
Thermo Scientific Orion Lab Star EC112 Conductivity Bench Meter with electrode stand, PC cable and universal power adapter	LSTAR1120
Thermo Scientific Orion Lab Star EC112 Conductivity Bench Meter standard kit, includes meter with electrode stand, PC cable, universal power adapter, 011050MD 2-cell K = 1.0 epoxy-body conductivity/ATC probe, 011007 1413 μ S/cm conductivity standard 5 x 60mL	LSTAR1125
Thermo Scientific Orion Electrode Arm with meter-attached bracket for Orion Lab Star meters	LSTAR-ARM
Thermo Scientific Orion Twist-and-Lock Universal Power Adapter for Orion Lab Star meters; 100-240V, 50/60Hz	LSTAR-PWR
Thermo Scientific Orion USB Computer Cable for Orion Lab Star meters	LSTAR-USB
Thermo Scientific Orion Dust Cover for Orion Lab Star meters	LSTAR-CVR
Thermo Scientific Orion Compact Ink-ribbon Printer for Orion Lab Star meters; 100-240V, 50/60Hz	STARA-106
Thermo Scientific Orion Replacement Ink Ribbon for compact printer, 6 pack	STARA-108
Thermo Scientific Orion Replacement Paper for compact printer, 5 pack	STARA-109

Learn more at thermofisher.com/electrochemistry

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