ThermoFisher SCIENTIFIC

Modern design, advanced performance

Thermo Scientific Orion Pro Star Electrochemistry Bench Meter Series

thermo scientific

Discover the Thermo Scientific™ Orion™ Pro Star electrochemistry bench meter series. Designed to provide accurate and reliable electrochemistry testing, the Orion Pro Star supports the way you work. Part of the industry-leading family of Orion electrochemistry products, the Orion Pro Star helps you unlock modern design and advanced performance.

Key benefits

- Large 7-inch, high-resolution color touchscreen display for optimized viewing and operation
- Enhanced user interface featuring guided navigation, troubleshooting assistance and helpful icons/prompts
- Small footprint with vertical meter orientation and freestanding electrode holder to facilitate flexible bench placement
- Durable construction with dust- and water-resistant housing (IP-54 rated)
- Stores up to 10000 data log sets, plus 20 calibration logs per parameter with dates and times to support GLP compliance

Experience
accurate, reliable
electrochemistry testing

Intuitive user interface

Robust data and calibration log storage

Dust- and water-resistant housing

Featured models

The Orion Pro Star series offers a comprehensive selection of models to help support your testing requirements.

- Thermo Scientific Orion Pro Star
  PH211 pH/ORP Bench Meter
- Thermo Scientific Orion Pro Star
  EC212 Conductivity Bench Meter
- Thermo Scientific Orion Pro Star
  DO213 Dissolved Oxygen Bench Meter
- Thermo Scientific Orion Pro Star
  PI214 pH/Ion Bench Meter
- Thermo Scientific Orion Pro Star
  PC215 pH/Ion & Conductivity Bench Meter
- Thermo Scientific Orion Pro Star
  PD216 pH/Ion & Dissolved Oxygen Bench Meter
- Thermo Scientific Orion Pro Star
  PI217 Dual Channel pH/Ion Bench Meter
- Thermo Scientific Orion Pro Star
  MP218 pH/Ion, Conductivity & Dissolved Oxygen Bench Meter

Advanced analysis

Designed to deliver fast, reliable results, the Orion Pro Star was built with efficiency and precision in mind. Featuring pH, conductivity, dissolved oxygen, ion concentration and multi-parameter models, a robust offering provides you with the right tools to help address a variety of analytical challenges. With up to three measurement channels, the Orion Pro Star streamlines your workflow and enhances productivity. Adapt to a range of testing scenarios with three measurement modes—continuous, auto-read and timed read. Additionally, get quick access to preferred settings. The Orion Pro Star saves up to 10 methods per channel to help optimize throughput and convenience

Practical design

Featuring a large 7-inch color touchscreen display, the Orion Pro Star offers a visually immersive interface. Thanks to its vertical meter orientation, it delivers a small footprint that requires minimal bench space. An ergonomic angled screen with anti-glare technology provides optimal visibility and comfort. A freestanding and smooth-moving electrode holder facilitates flexible placement to assist with performing measurements. Wires are also neatly tucked away with embedded cable clips on the electrode holder for improved organization. Designed to withstand your most demanding conditions, the Orion Pro Star is constructed from durable materials and contains dust- and water-resistant housing (IP-54 rated).

Intuitive interface

Every detail of the Orion Pro Star was thoughtfully designed to help make your job easier. From the moment you first power on your meter, innovative features await, like the setup wizard, which guides you through important settings and configurations. The home screen acts as a centralized hub to view measurements, complete calibrations, export data and more. You can even customize the way your data is displayed—simply select basic, advanced or custom layouts. The Orion Pro Star boasts an intuitive interface that's easy for technical and non-technical users to operate. Helpful features, such as a measurement stability indicator and calibration guidance, help ensure accurate and reliable measurements. Should an error occur, the Orion Pro Star is ready to help by providing on-screen troubleshooting assistance.

Functional features

Built with efficiency and practicality in mind, the Orion Pro Star supports the way you work. A meter-controlled and meter-powered stirrer probe provides uniform sample mixing.[1] For multi-parameter meters, one temperature sensor can be used across multiple channels. When it's time for routine maintenance, the Orion Pro Star can notify you via a friendly alert. To assist with security, the Orion Pro Star supports up to three administrators with full access and up to 30 users with customizable access, all secured with individual password protection for precise control over account permissions. Additionally, software updates are seamlessly installed via a USB flash drive, making it easy to keep your meter current with the latest features and advancements.

1. Stirrer probe not included as standard accessory with all Orion Pro Star electrochemistry bench meters. Check instrument ordering information on thermofisher.com for more details.

Dependable data

Effortlessly save and export measurements for long-term data retention with the Orion Pro Star. Store, display and manage up to 10000 data sets and 20 calibration logs per parameter, each complete with date and time stamps. Tailor reports to meet your specific needs by selecting data fields and including methods and calibration logs. Each entry provides comprehensive measurement information, neatly organized in an easy-to-read onscreen list, and can be integrated with your Laboratory Information Management System (LIMS) software. Filter data logs by user, date, time or log number, and export them using specific date and time ranges, log number ranges, or all at once. With the Orion Pro Star, easily export data to a printer, computer or USB flash drive for seamless data management and accessibility.

5.68 mg/L
765.0 mmHg
25.0 °C/mg
Log/Export
Orion Pro Star

Applications

From source water to wastewater and everything in between, the Orion Pro Star is well equipped to **address your toughest analytical challenges.**

Food and beverage

Industrial

Chemical

Petrochemical

Selection guide

Find the right Orion Pro Star electrochemistry bench meter for your needs. Browse parameter capabilities and instrument features to select the right fit for your measurement requirements.

	Orion Pro Star PH211	Orion Pro Star EC212	Orion Pro Star DO213	Orion Pro Star PI214	Orion Pro Star PC215	Orion Pro Star PD216	Orion Pro Star PI217	Orion Pro Star MP218
Parameters								
pH	✓			✓	✓	✓	✓	✓
mV	✓			✓	✓	✓	✓	✓
ORP	✓			✓	✓	✓	✓	✓
Ion Concentration				✓	✓	✓	✓	✓
Conductivity		✓			✓			✓
Total Dissolved Solids (TDS)		✓			✓			✓
Salinity		✓			✓			✓
Resistivity		✓			✓			✓
Dissolved Oxygen (DO) as % Saturation			✓			✓		✓
Dissolved Oxygen (DO) as mg/L			✓			✓		✓
Dissolved Oxygen (DO) as ppm			✓			✓		✓
Temperature	✓	✓	✓	✓	✓	✓	✓	✓
Features								
Color Touchscreen Display	✓	✓	✓	✓	✓	✓	✓	✓
Freestanding Electrode Holder	✓	✓	✓	✓	✓	✓	✓	✓
Stirrer Probe*	✓	✓	✓	✓	✓✓	✓✓	✓✓	✓✓
USB Flash Drive	✓	✓	✓	✓	✓	✓	✓	✓

*Stirrer probe not included as standard accessory with all Orion Pro Star electrochemistry bench meters. Meters with one checkmark contain one stirrer probe input; meters with two checkmarks contain two stirrer probe inputs. Check instrument ordering information on thermofisher.com for more details.

LABORATORY NOTEBOOK
7.245 pH
748.2 µS/cm
6.58 mg/L
pH 4.01 Buffer
pH 7.00 Buffer
pH 10.01 Buffer

Meter model overview

Orion Pro Star PH211 pH/ORP Bench Meter

- Measure pH, mV or ORP with temperature
- ±0.002 pH relative accuracy across -2 to 20 pH range
- Obtain temperature measurements automatically using an ATC sensor, manually or using ambient air temperature

Orion Pro Star EC212 Conductivity Bench Meter

- Measure conductivity, total dissolved solids (TDS), salinity or resistivity with temperature
- ±0.5% reading relative accuracy across 0.010 µS/cm to 3000 mS/cm range
- Perform temperature-compensated conductivity readings using linear, non-linear, EP/USP or off-compensation options and reference temperature options of 5, 10, 15, 20, 25 or 30°C

Orion Pro Star DO213 Dissolved Oxygen Bench Meter

- Measure dissolved oxygen as % saturation, concentration as mg/L or concentration as ppm with barometric pressure and temperature
- ±2% saturation, mg/L or ppm relative accuracy across 0.0 to 600.0% saturation or 0.01 to 90.0 mg/L or ppm range
- Automatically compensate dissolved oxygen readings for barometric pressure, using the built-in barometer or manual entry, and salinity, using manual entry

Orion Pro Star PI214 pH/Ion Bench Meter

- Measure pH, mV, ORP or ion concentration with temperature
- ±0.2 mV or ±0.05% of the reading relative accuracy across 0.0001 to 19999 ion concentration range
- Utilize selectable ion concentration units of ppt, ppm, ppb, mg/L, M, mM, %, none or user-defined

Ordering information

Choose from a selection of Orion Pro Star electrochemistry bench meters and meter kits offering different parameter capabilities and testing options for various application requirements.

Description	Cat. No.
Orion Pro Star PH211 pH/ORP bench meter with stand	PSTAR2110
Orion Pro Star PH211 pH/ORP bench meter difficult sample kit	PSTAR2114
Orion Pro Star PH211 pH/ORP bench meter standard kit	PSTAR2115
Orion Pro Star PH211 pH/ORP bench meter durable kit	PSTAR2116
Orion Pro Star PH211 pH/ORP bench meter low maintenance kit	PSTAR2117
Orion Pro Star PH211 pH/ORP bench meter micro kit	PSTAR2118
Orion Pro Star PH211 pH/ORP bench meter ORP kit	PSTAR2119
Orion Pro Star EC212 conductivity bench meter with stand	PSTAR2120
Orion Pro Star EC212 conductivity bench meter standard kit	PSTAR2125
Orion Pro Star EC212 conductivity bench meter pure water kit	PSTAR2126
Orion Pro Star DO213 dissolved oxygen bench meter with stand	PSTAR2130
Orion Pro Star DO213 dissolved oxygen bench meter standard DO kit	PSTAR2135
Orion Pro Star DO213 dissolved oxygen bench meter BOD kit	PSTAR2136
Orion Pro Star DO213 dissolved oxygen bench meter optical DO kit	PSTAR2137
Orion Pro Star PI214 pH/ion bench meter with stand	PSTAR2140
Orion Pro Star PI214 pH/ion bench meter pH kit	PSTAR2145
Orion Pro Star PI214 pH/ion bench meter ammonia kit	PSTAR2146
Orion Pro Star PI214 pH/ion bench meter fluoride kit	PSTAR2147
Orion Pro Star PI214 pH/ion bench meter sodium kit	PSTAR2148

Meter model overview

Orion Pro Star PC215 pH/Ion & Conductivity Bench Meter

- Measure pH, mV, ORP or ion concentration with temperature on channel 1
- Measure conductivity, total dissolved solids (TDS), salinity or resistivity with temperature on channel 2
- View channels simultaneously or individually

Orion Pro Star PD216 pH/Ion & Dissolved Oxygen Bench Meter

- Measure pH, mV, ORP or ion concentration with temperature on channel 1
- Measure dissolved oxygen as % saturation, concentration as mg/L or concentration as ppm with barometric pressure and temperature on channel 2
- View channels simultaneously or individually

Orion Pro Star PI217 Dual Channel pH/Ion Bench Meter

- Measure pH, mV, ORP or ion concentration with temperature on channel 1 and channel 2
- Perform 1- to 5-point pH calibrations, 1-point ORP calibrations, 1- to 5-point ion concentration calibrations and 1- to 2-point temperature calibrations
- View channels simultaneously or individually

Orion Pro Star MP218 pH/Ion, Conductivity & Dissolved Oxygen Bench Meter

- Measure pH, mV, ORP or ion concentration with temperature on channel 1
- Measure conductivity, total dissolved solids (TDS), salinity or resistivity with temperature on channel 2
- Measure dissolved oxygen as % saturation, concentration as mg/L or concentration as ppm with barometric pressure and temperature on channel 3
- View channels simultaneously or individually

Ordering information

Choose from a selection of Orion Pro Star electrochemistry bench meters and meter kits offering different parameter capabilities and testing options for various application requirements.

Description	Cat. No.
Orion Pro Star PC215 pH/ion and conductivity bench meter with stand	PSTAR2150
Orion Pro Star PC215 pH/ion and conductivity bench meter standard kit	PSTAR2155
Orion Pro Star PC215 pH/ion and conductivity bench meter pure water kit	PSTAR2156
Orion Pro Star PD216 pH/ion and DO bench meter with stand	PSTAR2160
Orion Pro Star PD216 pH/ion and DO bench meter standard pH and DO kit	PSTAR2165
Orion Pro Star PD216 pH/ion and DO bench meter pH and BOD kit	PSTAR2166
Orion Pro Star PD216 pH/ion and DO bench meter pH and optical DO kit	PSTAR2167
Orion Pro Star PI217 dual channel pH/ion bench meter with stand	PSTAR2170
Orion Pro Star PI217 dual channel pH/ion bench meter standard pH kit	PSTAR2175
Orion Pro Star PI217 dual channel pH/ion bench meter durable pH kit	PSTAR2176
Orion Pro Star PI217 dual channel pH/ion bench meter pH and ammonia kit	PSTAR2177
Orion Pro Star PI217 dual channel pH/ion bench meter pH and fluoride kit	PSTAR2178
Orion Pro Star PI217 dual channel pH/ion bench meter pH and sodium kit	PSTAR2179
Orion Pro Star MP218 pH/ion, conductivity and DO bench meter with stand	PSTAR2180
Orion Pro Star MP218 pH/ion, conductivity and DO bench meter pH, conductivity and DO kit	PSTAR2185
Orion Pro Star MP218 pH/ion, conductivity and DO bench meter pH, conductivity and optical DO kit	PSTAR2186
Orion Pro Star MP218 pH/ion, conductivity and DO bench meter pH and conductivity kit	PSTAR2187

Orion electrodes

Unlock the power and precision of Thermo Scientific™ Orion™ ROSS Ultra™, Thermo Scientific™ Orion™ ROSS™ SureFlow™, Thermo Scientific™ Orion™ ROSS™ and Thermo Scientific™ Orion™ electrodes. Choose from a wide variety of body materials, designs and features to find the right electrode for your application.

Description	Cat. No.
ROSS Ultra Triode refillable glass-body pH/ATC electrode	8302BNUMD
ROSS Ultra Triode refillable epoxy-body pH/ATC electrode	8157BNUMD
ROSS Ultra Triode gel-filled epoxy-body pH/ATC electrode	8107BNUMD
ROSS Ultra combination refillable glass-body pH electrode	8102BNUWP
ROSS Ultra combination refillable epoxy-body pH electrode	8156BNUWP
ROSS Ultra semi-micro combination refillable glass-body pH electrode	8103BNUWP
ROSS Ultra semi-micro combination refillable epoxy-body pH electrode	8115BNUWP
ROSS micro combination refillable glass-body pH electrode	8220BNWP
ROSS Ultra flat surface combination refillable epoxy-body pH electrode	8135BNUWP
ROSS spear tip combination refillable glass-body pH electrode	8163BNWP
ROSS Sure-Flow combination refillable epoxy-body pH electrode	8165BNWP
ROSS Sure-Flow combination refillable glass-body pH electrode	8172BNWP
ATC temperature probe with epoxy body	927005MD
ATC temperature probe with stainless steel body	927007MD
ATC micro temperature probe with stainless steel body	928007MD
ORP/ATC Triode refillable epoxy-body electrode	9180BNMD
ORP Sure-Flow combination refillable epoxy-body electrode	9678BNWP
Ammonia combination ion selective electrode	9512BNWP
Ammonia high-performance combination ion selective electrode	9512BNWP
Chloride combination ion selective electrode	9617BNWP
Fluoride combination ion selective electrode	9609BNWP
Sodium combination ion selective electrode	8611BNWP
Conductivity/ATC epoxy/graphite body electrode (4-cell, K=0.475)	013005MD
Conductivity/ATC stainless steel electrode (2-cell, K=0.1)	013016MD
Polarographic DO/ATC electrode with calibration sleeve	083005MD
Polarographic AUTO-STIR DO/ATC electrode with calibration sleeve	086030MD
Optical DO/ATC electrode with calibration sleeve and protective sleeve	087010MD

Orion solutions

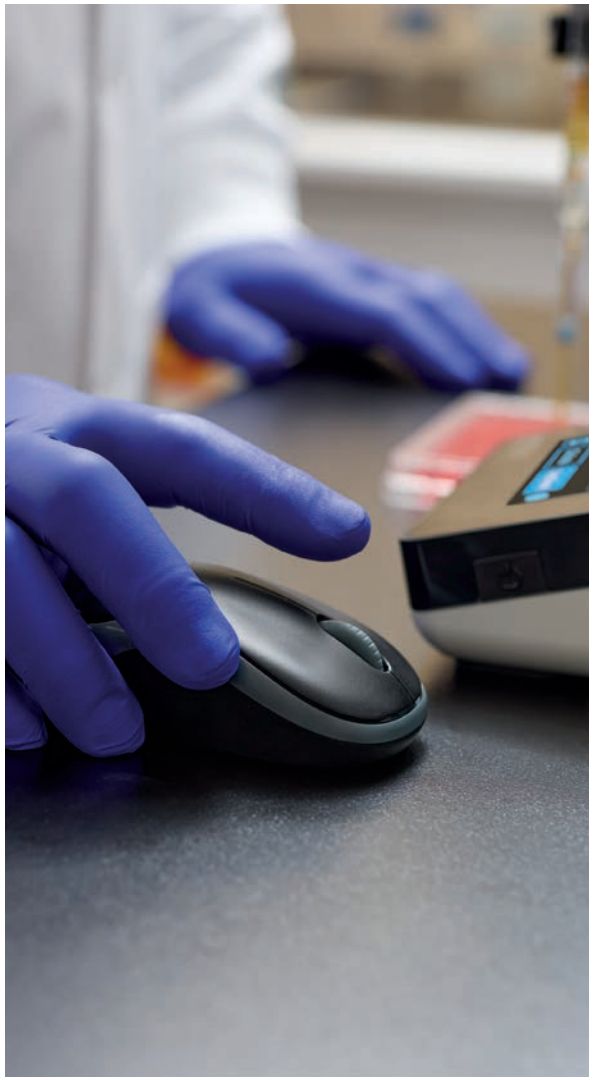
Achieve accurate and reproducible results with Thermo Scientific™ Orion™ solutions. Explore our extensive selection of buffers, standards, storage solutions and more.

Description	Cat. No.
Standard all-in-one pH buffer kit: pH 4.01, 7.00 and 10.01 buffers (475 mL each) and pH electrode storage solution	910199
ROSS all-in-one pH buffer kit: pH 4.01, 7.00 and 10.01 buffers (475 mL each), ROSS pH electrode storage, and 60 mL of electrode cleaning solution	810199
pH 1.68 buffer, 475 mL	910168
pH 4.01 buffer, 475 mL	910104
pH 6.86 buffer, 475 mL	910686
pH 7.00 buffer, 475 mL	910107
pH 9.18 buffer, 475 mL	910918
pH 10.01 buffer, 475 mL	910110
pH 12.46 buffer, 475 mL	910112
pH 4.01 buffer, 25 individual-use pouches	910425
pH 7.00 buffer, 25 individual-use pouches	910725
pH 10.01 buffer, 25 individual-use pouches	911025-WA
Electrode storage solution, 475 mL	910001
ROSS electrode storage solution, 475 mL	810001
ORP standard, +420 mV standard hydrogen electrode, 475 mL	967901
100 ppm ammonia as nitrogen standard, 475 mL	951207
Ammonia ionic strength adjuster (ISA) with pH-indicating blue dye, 475 mL	951211
100 ppm chloride standard, 475 mL	941707
Chloride ionic strength adjuster (ISA), 475 mL	940011
100 ppm fluoride standard, 475 mL	940907
10 ppm fluoride standard premixed with TISAB II, 475 mL	040908
5 ppm fluoride standard premixed with TISAB II5, 475 mL	F40905
2 ppm fluoride standard premixed with TISAB II, 475 mL	040907
1 ppm fluoride standard premixed with TISAB II, 475 mL	040906
0.5 ppm fluoride standard premixed with TISAB II, 475 mL	F40904
Fluoride TISAB II solution, 1 gallon	940909
100 ppm sodium standard, 475 mL	941107
Sodium ionic strength adjuster (ISA), 475 mL	841111
100 µS/cm conductivity/TDS standard, 5 x 60 mL	011008
1413 µS/cm conductivity/TDS standard, 5 x 60 mL	011007
12.9 mS/cm conductivity/TDS standard, 5 x 60 mL	011006
111.9 mS/cm conductivity standard, 5 x 60 mL	011005
1413 µS/cm conductivity/TDS standard, 10 individual-use pouches	01100710
12.9 mS/cm conductivity/TDS standard, 10 individual-use pouches	01100610
111.9 mS/cm conductivity standard, 10 individual-use pouches	01100510

Orion Pro Star accessories

Enhance your Orion Pro Star experience with a range of premium accessories designed to maximize functionality and convenience. From protective covers to barcode scanners, each accessory supports optimal performance and efficiency for your workflow.

Description	Cat. No.
Orion bench meter stirrer probe	096019-WA
Orion compact ink printer, includes meter cable, paper, ink ribbon, 100-240V 50/60Hz power adapter	STARA-106
Orion Pro Star series USB flash drive	PSTAR-UFD
Orion Pro Star series USB mouse	PSTAR-UMS
Orion Pro Star series USB keyboard	PSTAR-UKB
Orion Pro Star series USB barcode scanner	PSTAR-UBS
Orion Pro Star series electrode stand with base	PSTAR-ARM
Orion Pro Star series universal power supply, 100-240V, 50/60Hz	PSTAR-PWR
Orion Pro Star series USB computer cable	PSTAR-USB
Orion Pro Star series standard protective display cover	PSTAR-PCS
Orion Pro Star series rugged protective display cover	PSTAR-PCR



Learn more at **thermofisher.com/orionprostar**

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