



Thermo Scientific Orion Star A322 & Star A222 Conductivity Portable Meters

Orion Star A322

The Thermo Scientific Orion Star A322 Conductivity Portable Meter is the top choice for advanced measurements on location. Get the information you need quickly and easily from the large, backlit graphic LCD display. Informative display shows conductivity/TDS/salinity resistivity and temperature along with electrode status, time, date, sample ID, user ID and calibration points. Advanced features such as stability and averaging options provide additional options allowing for laboratory accuracy everywhere you need it.

Features and Benefits

- Anyone can use this meter with its plain language screen prompts, soft keys that update for easy selection and a multilanguage interface that supports English, Spanish, French, Italian, German and Chinese
- Don't miss a reading – AUTO-READ™ locks in the stable reading on your screen, ready indicator alerts when readings are stable and timed reading gathers data in specific time intervals
- Selectable cell constant allows for use with 2- or 4-cell conductivity cells
- For advanced accuracy, selectable reading reference temperatures of 5, 10, 15, 20 or 25 °C with linear, non-linear, nLFu or USP/EP curve options
- Choice of practical salinity or natural sea water curves for salinity readings
- Linear or ISO/EN 27888 curves for TDS
- Non-volatile memory holds up to 5000 data points with time and date stamp
- User and sample ID fields for additional data accuracy
- Stores up to 10 methods allow for customized procedures to differentiate between tests and/or users
- Easily transfer data and keep meter software up-to-date with the USB and RS232 ports and complimentary data analysis software
- Four AA batteries (included) provide over 800 hours of operation or purchase the universal power adapter (sold separately) to use AC power
- Perfectly portable, waterproof and protected to take anywhere with a IP67-rated housing
- 3 year meter replacement warranty



Orion Star A222

Get the readings that you need where you need them with the Thermo Scientific Orion Star A222 Conductivity Portable Meter. The large, backlit graphic LCD display shows conductivity/TDS/salinity/resistivity and temperature along with electrode status, time, date and calibration points.

Features and Benefits

- Anyone can use this meter with its plain language screen prompts, soft keys that update for easy selection and a multilanguage interface that supports English, Spanish, French, Italian, German and Chinese
- Don't miss a reading – AUTO-READ™ locks in the stable reading on your screen and ready indicator alerts when readings are stable
- Selectable cell constant allows for use with 2- or 4-cell conductivity cells
- Selectable reading reference temperatures of 15, 20 or 25 °C with linear or non-linear curve options
- Includes the standard practical salinity curve for salinity readings
- Linear or ISO/EN 27888 curves for TDS
- Non-volatile memory holds up to 1000 data points with time and date stamp
- Easily transfer data and keep meter software up-to-date with the USB and RS232 ports and complimentary data analysis software
- Four AA batteries (included) provide over 800 hours of operation or purchase the universal power adapter (sold separately) to use AC power
- Perfectly portable, waterproof and protected to take anywhere with a IP67-rated housing
- 3 year meter replacement warranty





Product Specifications (Orion Star A322 & Star A222)

CE TUV FCC		
Conductivity	Range	0.001 µS to 3000 mS
	Resolution	0.001 µS minimum; 4 significant figures minimum
	Relative Accuracy	0.5 % reading ±1 digit
	Reference Temperature	Orion Star A322: 5, 10, 15, 20, 25 °C Orion Star A222: 15, 20, 25 °C
	Temperature Compensation	Orion Star A322: Linear (0 to 10.0 %/°C), nLn, nLFu, USP/EP Orion Star A222: Linear (0 to 10.0 %/°C), nLn
	Compatible Cell Constants	0.001 to 199.9
	Calibration Points	Up to 5 points
	Calibration Editing	Orion Star A322: Yes Orion Star A222: –
Resistivity	Range	2 ohm to 100 meg-ohm
	Resolution	2 ohms-cm
	Relative Accuracy	0.5 % reading ±1 digit
Salinity	Type	Orion Star A322: Practical salinity or natural sea water Orion Star A222: Practical salinity
	Range	0.01 to 80.0 psu 0.01 to 42 ppt sea water
	Resolution	0.01
	Relative Accuracy	±0.1
TDS	Range	0 to 200 ppt
	Resolution	4 significant digits
	Relative Accuracy	±0.5 % reading ±1 digit
	TDS Factor Range	Linear, 0.01 to 10.00
Temperature	Range	-5 to 105 °C, 23 to 221 °F
	Resolution	0.1
	Relative Accuracy	±0.1
	Offset Calibration	1 point
Datalogging	Number of Datalogs	Orion Star A322: 5000 with time and date stamp Orion Star A222: 1000 with time and date stamp
	Log Function	Orion Star A322: Manual, ready (includes AUTO-READ™), timed Orion Star A222: Manual, Automatic with AUTO-READ™
Inputs	Conductivity with Temperature Probe	8-pin mini-DIN
Output		RS232, USB
Power	AC Adapter	Optional – universal, 100-240 VAC
	Battery Power	Included – 4 AAs
	Battery Life	800 hrs

Meter Ordering Information

Cat. No.	Description
STARA3220	Orion Star A322 Conductivity Portable Meter - Four AA batteries (installed)
STARA3225	Orion Star A322 Conductivity Portable Meter Kit - 013010MD Orion DuraProbe conductivity cell with 3m cable, K=0.475 - 01100710 conductivity standard pouches, 1413 µS, pack of 10 - 911110 rinse solution, pack of 10 - Protective armor with electrode holder - Hard carrying case - Four AA batteries (installed)
STARA2220	Orion Star A222 Conductivity Portable Meter - Four AA batteries (installed)
STARA2225	Orion Star A222 Conductivity Portable Meter Kit - 013010MD Orion DuraProbe conductivity cell with 3m cable, K=0.475 - 01100710 conductivity standard pouches, 1413 µS, pack of 10 - 911110 rinse solution, pack of 10 - Protective armor with electrode holder - Hard carrying case - Four AA batteries (installed)

Accessories

Cat. No.	Description
STARA-CS	Hard carrying case for Orion Star A-series portable meters
1210005	Soft carrying case for Orion Star, Star Plus and Star A-series portable meters
STARA-AR	Armor for Orion Star A-series portable meters, includes electrode holders for pH, conductivity and DO probes
STARA-ESCD	Conductivity and DO probe holder for Orion Star A-series armor
STARA-ESPH	pH electrode holder for Orion Star A-series armor
013005MD	Orion DuraProbe conductivity cell with 1.5m cable, 4-cell, K=0.475
013010MD	Orion DuraProbe conductivity cell with 3m cable, 4-cell, K=0.475
013020MD	Orion DuraProbe conductivity cell with 6m cable, 4-cell, K=0.475
013025MD	Orion DuraProbe conductivity cell with 10m cable, 4-cell, K=0.475
1010003	Optional universal power adapter, 100-240 V, 50/60 Hz
011008	Orion conductivity standard, 100 µS/cm, 5 x 60 mL bottles
01100710	Orion conductivity standard pouches, 1413 µS/cm, 10/pk
01100610	Orion conductivity standard pouches, 12.9 mS/cm, 10/pk
911110	Orion rinse solution pouches, 10/pk
1010001	Orion conductivity calibration resistor kit

That's not all. We have more new meters on the following pages.

- pH ■
- ISE ■
- ORP ■
- Cond ■
- RDO ■
- DO ■
- Temp ■