## **ProDSS General Specifications**

User-defined auto-stable function holds stable readings on display when criteria is met		
Auto buffer recognition and temperature compensation for US and NIST buffers		
MS (military spec) waterproof with bayonet lock		
1, 2, or 3 point for pH, Turbidity, Ammonium, Nitrate, and Chloride; 1 or 2 point for DO; 1 point for ORP, Barometer, Conductivity, Specific Conductance, Salinity, and Depth		
CE; RoHS; IP-67; WEEE; FCC; UN Part III, Section 38.3, Test methods for lithium-ion batteries (Class 9)		
Built-in micro USB; Cable for PC connection and cable for connection to USB memory stick are included		
KorDSS desktop software included; 100 user-defined Data ID tags and 100 Sites with GPS coordinates		
>100000 data sets (data, date, time, user-defined info); 100 files		
Handheld is 8.3 x 21.6 x 5.6 cm		
Color, LCD graphic display; 3.9 x 6.5 cm		
Yes; 400 detailed GLP records can be stored and are available to view, download and print		
Optional internal GPS; coordinates are stored with measurement data and site lists		
English, Spanish, German, French, Italian, Norwegian, Portuguese, Japanese, Chinese (Simplified & Traditional), Korean, Thai		
Single Point or Continuous		
0 to 50° C		
Calibration menu can be password protected to prevent unauthorized sensor calibration		
Rechargeable lithium-ion battery pack provides ~20 hours with the handheld, 4 port cable and 4 smart sensors; battery recharge time is ~9 hours with the AC power adapter		
0 to 45° C with battery installed; 0 to 60° C without battery installed		
Provides reminder to recalibrate a ProDSS sensor after user-defined number of days		
Optional user ID for data security		
Built-in micro USB On-The-Go port for PC connection, recharging/powering the ProDSS and connecting directly to a USB stick		
3-year; 2-year bulkhead, cable assembly, sensors; and ODO Extended Warranty cap; 1-year pH and pH/ORP sensor modules, ODO sensor caps, and Li-ion battery pack; 6-months ammonium, nitrate, and chloride sensor modules		
IP-67; floats		
567 grams (1.25 lbs)		



## **ProDSS Sensor Specifications**

Sensor/Parameter	Range	Resolution	Accuracy
Temperature	-5 to 70 °C (temperature compensation range for DO mg/L measurement: -5 to 50 °C)	0.1 °C or 0.1 °F (user selectable)	±0.2 °C
рН	0 to 14 pH units	0.01 pH units	±0.2 pH units
ORP	-1999 to 1999 mV	0.1 mV	±20 mV
Dissolved Oxygen	0 to 500%, 0 to 50 mg/L	0.01 mg/L and 0.1%, or 0.1 mg/L and 1% (user selectable)	0 to 200%: ±1% of reading or 1% saturation, whichever is greater 200 to 500%: ±8% of reading 0 to 20 mg/L: ±0.1 mg/L or 1% of reading, whichever is greater 20 to 50 mg/L: ±8% of reading
Barometer	375 to 825 mmHg	0.1 mmHg	±1.5 mmHg from 0 to 50 °C
Conductivity	0 to 200 mS/cm	0.001, 0.01 or 0.1 µS/cm (range dependent)	0 - 100 mS/cm: ±0.5% of reading or .001 mS/cm, whichever is greater 100 - 200 mS/cm: ±1.0% of reading
Specific Conductance*	0 to 200 mS/cm	0.001, 0.01, 0.1 mS/cm	0 - 100 mS/cm: ±0.5% of reading or .001 mS/cm, whichever is greater 100 - 200 mS/cm: ±1.0% of reading.  User selectable reference temperature (15 to 25 °C; default 25 °C) and compensation coefficient (0 to 4%/°C; default 1.91%)
Salinity*	0 to 70 ppt	0.01 ppt	±1.0% of reading or ±0.1 ppt, whichever is greater
Total Dissolved Solids (TDS)*	0 to 100 g/L	0.001, 0.01, 0.1 g/L	Calculated from specific conductance and a user-selectable TDS multiplier (0.30 to 1.00; default 0.65)
Resistivity*	0 to 2 Mohms	0.001, 0.01, 0.1 ohms	±0.1% Full Scale
Seawater Density*	0.0 to 50.0 sigma, sigma T	0.1 sigma or sigma T	-
Turbidity	0 to 4000 FNU	0.1 FNU	0 to 999 FNU: 0.3 FNU or ±2% of reading, whichever is greater 1000 to 4000 FNU: ±5% of reading
TAL-Chlorophyll  TAL-Phycocyanin  TAL-Phycoerythrin	0 to 100 RFU or 0 to 400 μg/L chl 0 to 100 RFU or 0 to 400 μg/L PC 0 to 100 RFU or 0 to 400 μg/L PE	0.01 RFU or 0.01 μg/L	Linearity: $r^2 \ge 0.999$ for Rhodamine WT across full range
Ammonium**	0 to 200 mg/L NH <sub>4</sub> -N	0.01 mg/L	±10% of reading or 2 mg/L, whichever is greater
Ammonia*	0 to 200 mg/L NH <sub>3</sub> -N	0.01 mg/L	-
Chloride**	0 to 18000 mg/L Cl	0.01 mg/L	±15% of reading or 5 mg/L, whichever is greater
Nitrate**	0 to 200 mg/L NO <sub>3</sub> -N	0.01 mg/L	±10% of reading or 2 mg/L, whichever is greater
Depth	0 to 328 feet (0 to 100 m)	0.001 m or 0.01 ft	±0.004 m for 1, 4, and 10 m cables ±0.04 m for cables 20 m and longer

<sup>\*</sup>Derived/calculated parameter
\*\*ISEs for freshwater only; 20-meter maximum depth