

APPLICATIONS

- Environmental monitoring
- Industrial water and wastewater treatment
- Aquaculture and commercial fish farming
- Live fish transportation
- Educational / Research facilities



OPTIONS AND ACCESSORIES

The probes can be used with either a PT4 Tracker handheld meter, or a stationary PT4 ION system. They both feature datalogging capabilities (optional for the PT4 Tracker), tough membrane keypad and graphical display with a user selectable backlight. The PT4 Tracker comes with a rechargeable battery pack, charger cable with AC adapter, and waterproof pouch.

The PT4 ION is a field bus monitoring and control system that utilizes RS485 Modbus protocol. The system uses smart sensors/probes (input) and smart relay cards (output). It has optional wireless capabilities.



PT4 TRACKER METER SPECIFICATIONS

- Power: NiMH rechargeable battery pack / 20 mA (backlight off), 40 mA (backlight on). Includes battery charger and adapter.
- Battery Life (backlight off): NiMH cells - 100 hours
- Connector: 6 pin - IP68 rated connector
- Cable: Std. 5 m (16.4 ft) four conductor, polyurethane jacket, with custom lengths available on request.
- Charger Cable: Std. 1.5 m (5 ft)
- AC adapter: 100-240 VAC / 47-63 Hz / 12 VDC. 0.85 Amp

SHIPPING INFORMATION (PT4 Tracker with 1 probe)

- Boxed Weight: 1.0 kg (2.2 lbs)
- Dimensions: 28x33x13 cm (11x13x5 in)

PARTS AND ACCESSORIES

- 1SSA003 Replacement TGP cartridge (includes membrane).
- 1SX971570 Replacement Combination pH Electrode
- 1SX971570ORP Replacement Combination ORP Electrode
- 1SSA005 Replacement charger cable with AC adapter.
- 1SSA006 Charger cable with car adapter.
- 1SSA007 Replacement data transfer cable with USB adapter.
- 1SSA008 Data transfer cable with RS232 adapter.



POINT FOUR SMART PROBES

Introducing the family of Smart Probes
- great flexibility and simple to use

The SMART PROBES are used in combination with a user-interface (PT4 Tracker, PT4 ION, or directly connected to a PC) to provide measurements for Dissolved Oxygen (DO), Total Dissolved Gas Pressure (TGP), Temperature, pH, or ORP according to the selected probe.

Smart Probes are the only probes on the market that can be used with either a fixed system, the PT4 ION (Input/Output Network) or a portable system, the PT4 Tracker, without requiring any modifications ("Plug & Play"). The 4 probes are each temperature and pressure compensated as required. All probe calibrations and parameters are stored within the probe's built-in memory. The result is that the probes can be changed without requiring meter calibration every time.

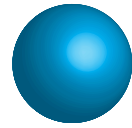


When used with the PT4 ION, each probe can be user-defined (up to 8 characters of description, e.g. Pond A, Pond B, etc.). The user has several choices to display the probe's measured and derived parameters.

FEATURES AND BENEFITS

- Only one meter required for all probes purchased.
 - reduces end-user costs.
- Datalogging capable and external battery connection.
 - provides the user with long-term deployment options.
- User changeable electrodes.
 - allows for quick servicing on location.
- Easy to use.
 - user configurable with intuitive menu system.
- Full 1 year warranty.
 - covering defective materials and workmanship.





Dissolved Oxygen (DO)

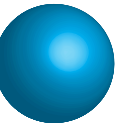
The PT4 Smart Oxygen Probe can measure both dissolved oxygen and oxygen in gas, and can be used in fish farms, sewage treatment works and similar as well as to measure air, pure oxygen, other gases, oils, wine etc.

The Smart Oxygen Probe is virtually maintenance free - just wipe the membrane and check the calibration from time to time, the frequency depending on the actual conditions. PT4 Smart Oxygen Probe do not need regular service.

SPECIFICATIONS

Part #: 1SSP020

Channel	Measurement Range	Resolution	Accuracy
Measured:			
Dissolved Oxygen [DO]	0 to 50 mg/L	0.1 mg/L	+/- 0.2 mg/L
Temperature [°C]	0 to 40 °C	0.2 °C	+/- 0.2 °C



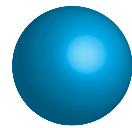
Total Dissolved Gas Pressure (TGP)

Increasing water temperatures, injection of air in turbid water, algal blooms, or pressurized pumping can result in gas supersaturation. This may lead to bubble trauma or sub-lethal toxicological problems for aquatic species. The TGP probe provides a rapid and accurate measurement of total dissolved gas pressure.

SPECIFICATIONS

Part #: 1SSP003

Channel	Measurement Range	Resolution	Accuracy
Measured:			
Total Gas Pressure [TGP]	0 to 1550 mmHg	1 mmHg	+/- 2.0 mmHg
Temperature [°C]	0 to 40 °C	0.1 °C	+/- 0.2 °C
Derived via ION or Tracker			
Total Gas Pressure [% SAT]	0 to 200%	0.1%	+/- 4.0 % SAT
ΔP [TGP - BP]	+/- 1500 mmHg	1 mmHg	+/- 4.0 mmHg



pH

The pH of water (acidity) determines the solubility of chemical constituents. Practically every phase of water supply and wastewater treatment is pH-dependent. In the environment, pH will affect how much and what form of CO₂ or ammonia is present in the water (both can be potentially lethal for aquatic species).

SPECIFICATIONS

Part #: 1SSP004 (lab)

Part #: 1SSP021 (Industrial)

Channel	Measurement Range	Resolution	Accuracy
Measured:			
pH	0 - 14 pH	1 pH	+/- 0.2 pH
Temperature [°C]	0 to 40 °C	0.2 °C	+/- 0.2 °C



SPECIFICATIONS

Part #: 1SSP006 (lab)

Part #: 1SSP030 (Industrial)

Channel	Measurement Range	Resolution	Accuracy
Measured:			
ORP	+/- 2000 mV	1 mV	+/- 10% of mV
Temperature [°C]	0 to 40 °C	0.2 °C	+/- 0.2 °C



ORP / REDOX

ORP stands for Oxidation-Reduction Potential. Oxidation and reduction (REDOX) reactions mediate the behavior of many chemical elements in drinking, process, and wastewaters. Their reactivity and mobility depend strongly on redox conditions. ORP is generally used for ozone and chlorine control in water.

