



a xylem brand



Parameters:

- Dissolved Oxygen (optical or electrochemical)
- pH
- ORP/Redox
- Conductivity/Salinity
- Temperature
- Turbidity\*
- TSS (total suspended solids)\*
- Ammonium
- Nitrate
- Potassium
- COD (chemical oxygen demand)\*
- TOC (total organic carbon)\*
- DOC (dissolved organic carbon share of TOC)\*
- SAC (spectral absorption coefficient)\*
- BOD (biochemical oxygen demand)\*

\* ultrasonic cleaning for sensors

### YSI IQ SensorNet 182 Terminals

#### Continuous Water Quality Monitoring for Process Control

The YSI IQ SensorNet 182, 182 XT and 182 XT-4 are modular water quality terminals for complete process control designed for wastewater. The network can accept additional sensors easily at any time and grow as your facility grows. Benefits include better network visibility and management, early detection of network failures, improved compliance with regulatory targets, and cost savings (energy, pump/blower maintenance, labor).

- 3-year instrument warranty
- User-replaceable cables and sensors. Many sensors provide ultrasonic cleaning.
- Centralized power supply along entire network; 2-wire cable provides power and communications
- Lightning protection along network
- Tactile buttons; easily use while wearing gloves
- Modular expansion from 1 to 4 sensors
- Digital outputs available
- LED status light
- Programmable access permission
- System redundancy if two terminals are used; use in location or move from point to point

Building a system is easy...choose the IQ SensorNet terminal, determine which modules are needed (control, communications, etc.), determine distances for cabling and select parameters.



182 Terminal Stacked on Modules

| Model 182    | Model 182 XT | Model 182 XT-4 |
|--------------|--------------|----------------|
| 1-2 Sensors  | 1-2 Sensors  | 1-4 Sensors    |
| 2 mA Outputs | 4 mA Outputs | 5 mA Outputs   |
| 3 relays     | 5 relays     | 6 relays       |

## IQ SensorNet 182, 182 XT, 182 XT-4 Terminal/Controller Specifications

|                                 |   |
|---------------------------------|---|
| Certifications                  | ETL, cETL (conforms with relevant UL and Canadian standards), CE  |
| Electromagnetic Compatibility   | EN 61326, Class B; FCC Class A, EMC for indispensable operation   |
| Integrated Lightning Protection | According to EN 61326 enhanced over-voltage protection for <i>entire system</i> , implemented in each component   |
| Cable                           | 2-wire with shield for power supply and communications; resistant to polarity reversal; comprehensive EMC shield control; cable topology within network can be in the form of a line, tree, star or multiple star<br>Total cable length max. = 1000 m (3280 ft) without signal amplifying; with signal amplifying module MIQ/JBR add an additional 1000 m   |
| Radio                           | Radio transmission Class 1 with a range of 100 m (328 ft); max 300 m (984 ft)   |
| Module Coupling at Rear         | Combined mechanical and electrical connection for rapid coupling to modules; no wiring required   |
| Display                         | Graphic display; resolution 128 x 64 pixels; visible area 72 x 40 mm (2.83 x 1.57 in); backlit  |
| Control Keys/Buttons            | 5 operation keys: 3 master keys for Measurement (M), Calibration (C), Set/System settings (S)<br>2 function keys for confirmation/switching menu OK (OK) and Escape (ESC)<br>2 knobs for quick selection of software functions and input of alphanumeric values (up), (down)  |
| Electrical                      | 100 to 240 VAC (50/60 Hz), 24 VAC/DC  |
| Temperature Conditions          | Operating Temperature: -4 to 131 °F (-20 to 55 °C)<br>Storage Temperature: -13 to 149 °F (-25 to 65 °C)   |
| Enclosure                       | Material: PC-20% (Polycarbonate with 20% fiberglass)<br>Rating: IP-66, equivalent to NEMA 4X (not suitable for conduit connection)<br>Dimensions for 182: 144 W x 144 H x 95 D mm (5.67 W x 5.67 H x 3.74 D in)<br>Dimensions for 182 XT and 182 XT-4: 144 W x 144 D x 143 D mm (5.67 W x 5.67 H x 5.63 D in)<br>Weight for 182: 1 kg (2.2 lbs)<br>Weight for 182 XT and 182 XT-4: 1.5 kg (3.31 lbs)<br>Warranty: 3 years |

## IQ SensorNet 182, 182 XT, 182 XT-4 Module (DIQ) Specifications

|                          |   |
|--------------------------|---|
| Module Coupling at Front | Combined mechanical and electrical connection for rapid docking and removal of the terminal and docking additional modules  |
| Module Coupling at Rear  | Combined mechanical and electrical connection for docking additional modules; a total of 3 modules as a stacked mounted unit  |
| Cable Feeds              | 4 screw cable glands M 16 x 105   |
| Terminal Connections     | Screw terminal strips; terminal area for solid connectors 0.2 to 4.0 mm for flexible connectors 0.2 to 2.5 mm; accessible through cover<br>Used for connecting sensors or as an input/output or for looping through/branching of the IQ SensorNet cable |
| Additional Functions     | Two LEDs (yellow and red) for monitoring the operating voltage; lightning protection; connection resistant to reversed polarity; integrated local identity; integrated switchable terminal resistor (SN terminator)                                     |
| Enclosure                | Material: PC 20% GF (Polycarbonate with 20% fiberglass)<br>Rating: IP-66, equivalent to NEMA 4X (not suitable for conduit connection)<br>Dimensions: 95 W x 95 H x 58 D mm (3.74 W x 3.74 H x 2.38 D in)<br>Warranty: 3 years                           |

## IQ SensorNet 182, 182 XT, 182 XT-4 Ordering Information (order terminal, modules, cables, sensors separately)\*

|                                  |  |
|----------------------------------|--|
| DIQ/S 182<br>Item #472 000Y      | Central terminal/controller unit only. Required to be installed once at any point, remains in the system and cannot be removed.<br>With 2 analog outputs and 3 relays. Up to 2 sensors can be connected. |
| DIQ/S 182 XT<br>Item #472 001Y   | Central terminal/controller unit only. Required to be installed once at any point, remains in the system and cannot be removed.<br>With 4 analog outputs and 5 relays. Up to 2 sensors be connected.     |
| DIQ/S 182 XT-4<br>Item #472 015Y | Central terminal/controller unit only. Required to be installed once at any point, remains in the system and cannot be removed.<br>With 5 analog outputs and 6 relays. Up to 4 sensors be connected.     |

\* There are 11 additional options to order the 182 terminals as part of a kit. Please visit [www.YSI.com/IQSN182](http://www.YSI.com/IQSN182) to see all available models.

### YSI

1725 Brannum Lane, Yellow Springs, OH 45387  
Tel +1 937.767.7241 800.897.4151 (US)  
[environmental@ysi.com](mailto:environmental@ysi.com)  
[YSI.com](http://YSI.com)

YSI is a registered trademark.  
Specifications are subject to change. Please visit [YSI.com](http://YSI.com) to verify all specs.  
©2012 YSI  
Printed in the USA. W101 January, 2012



a xylem brand