

IF-001

Layer N USB Smart Interface



- USB to Smart Probe Interface
- USB 2.0 compliant
- 2-meter length cable
- Layer N, SYNC, and Omega Enterprise Gateway supported
- Modbus RTU, Modbus ASCII compatible
- Simple command line interface



USB to Smart Probe Integration

The Layer N IF-001 Smart Interface cable provides an easy way to configure and monitor Omega Smart Probes. The USB 2.0 compliant device appears as a serial port and is compatible with Windows, iOS, and Linux.

The IF-001 can connect directly to a Layer N Gateway to integrate Smart Probes into a Layer N ecosystem. It also provides a Modbus RTU or Modbus ASCII interface to the entire smart sensor register set.

An integrated command line interface allows for quick smart sensor register configuration and monitoring using standard terminal emulators.

The 8-pin M12 connector provides 3.3 V_{DC} power for external Smart Sensor probe with an integrated power monitor to protect against short circuits.

Specifications

Environmental

Environmental Rating: NEMA 6 IP67 when mated (M12 end only)

Operating Temperature: -20 to 80°C (-4 to 176°F), non-condensing

Vibration: 10 Gs at 10 Hz to 500 Hz (M12 end only)

General

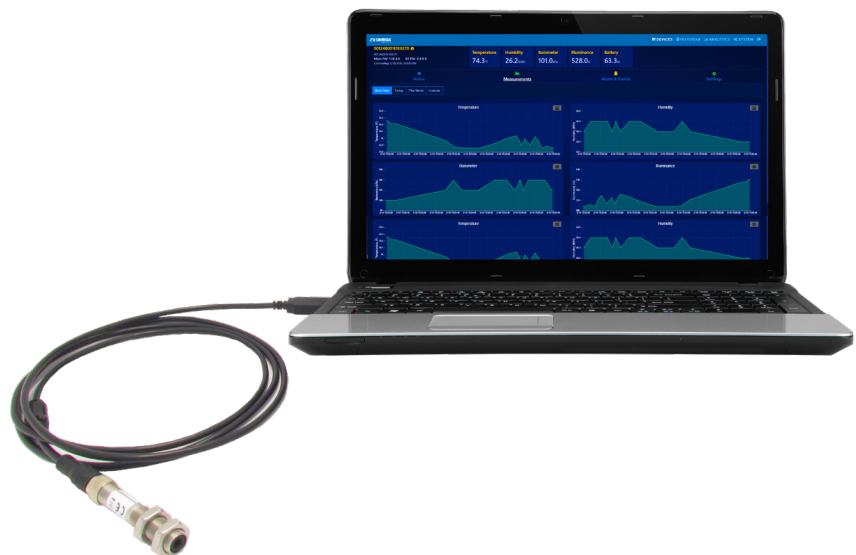
Power: USB Powered. Supplies up to 100 mA to sensor

Length: 2-meter cable

Agency Approvals: CE, WEEE

Setup: Supports USB PnP setup and SYNC configuration software

Interface: USB 2.0



Layer N USB Smart Interface Model

Model Number	Description
IF-001	Layer N Smart Probe USB Interface (2-meter length cable)

Layer N Smart Probe Models

Compatible Layer N Smart Probes are integrated with an advanced suite of IIoT Smart Core features. These features enable plug and play connectivity, alarms and notifications, data assurance, data logging, and storage.

Model Number	Description
SP-001-0	Smart Probe IR, 6:1 field of view
SP-001-1	Smart Probe IR, 6:1 field of view, with discrete I/O
SP-002-0	Smart Probe IR, 10:1 field of view
SP-002-1	Smart Probe IR, 10:1 field of view with discrete I/O
SP-003-1	THB Smart Probe with I/O Tube Housing
SP-004-1	TH Smart Probe with I/O Tube Housing
SP-004-4	TH Smart Probe with I/O Bulkhead Housing
SP-005-1	Temperature and RTD Smart Probe with discrete I/O
SP-010-1	Load Cell Smart Probe with discrete I/O
SP-013-1	Digital Interface Smart Probe with discrete I/O
SP-014-1	Process Monitoring Smart Probe with discrete I/O
SP-016-1	Heat Flux Smart Probe with discrete I/O

How Do Layer N Products Work?

Smart Sensors

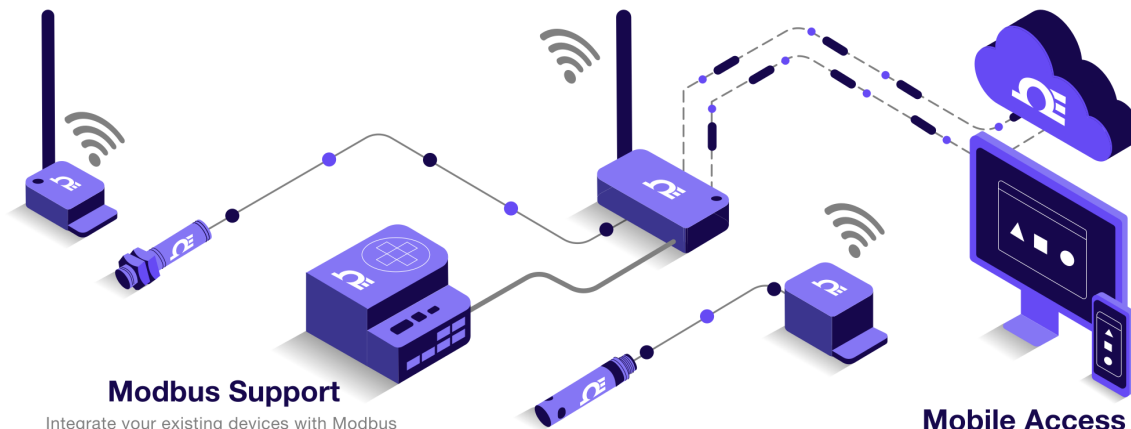
Sense, store, and process real-time data with superior connectivity

Gateway

Collect and securely transport data from the sensor layer to the cloud

Cloud

Continuously collects and process sensor data providing real-time reporting and analytics



Modbus Support

Integrate your existing devices with Modbus for intelligent data transport to the cloud.

Wireless Smart Interface

Provides wireless integration of Smart Probes to the Layer N Gateway to create a fully customized wireless solution that fits your application

Mobile Access

Access your data anytime anywhere with an Internet connection