

Specifications

Wireless Communication

Frequency: 868 MHz

Range*: Up to 1.2km in low power mode
Up to 3.2 km in high power mode

**Clear line of sight. Actual range may vary depending on environment.*

Power

Alkaline Battery: 2x C-Cell batteries (included)

Transmit Power	Update Time	Battery Life*
Low	2 Mins	2 Years
Low	90 Mins	5+ Years
High	2 Mins	1 Year
High	90 Mins	3 Years

** Typical. Actual battery life may vary depending on the connected sensor, signal strength and environmental conditions.*

External Power: 5 V_{DC} @ 1.75 W

**External power adapter optional. External power specification based on Omega specific power adaptor.*

Environmental

Operating Conditions for Base Unit: -20°C to 70°C (-4°F to 158°F), 90% RH non-condensing
Rating: IP65

General

Software: Compatible with SYNC configuration software and Layer N Cloud

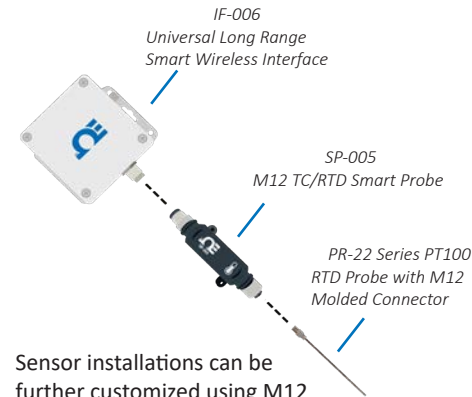
Certification

Contains FCC ID: WR3-MOD16370915

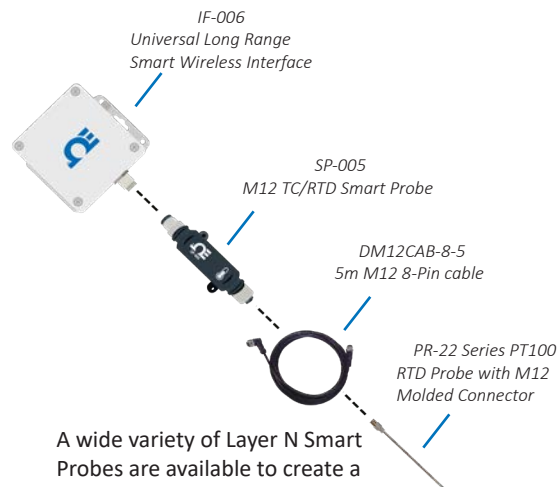
Contains IC ID: 8205A-MOD16370915

Modular Universal Design

The Layer N IF-006 Interface is designed to be used in conjunction with Layer N Smart Probes. The two elements snap together with a twist of an M12 connector to create a universal solution for any sensor application.



Sensor installations can be further customized using M12 modular extension cables to quickly tailor solutions for any application.



A wide variety of Layer N Smart Probes are available to create a customized wireless solution that fits your application. Including temperature, humidity, pressure, light, thermocouple, RTD, process, count, pulse, load cell, heat flux, and more.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair or calibration,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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QUICK START



layer



IF-006
Layer N Wireless Sub GHz Smart Interface

OMEGA

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For Other Locations Visit omega.com/worldwide

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

Introduction

Use this Quick Start Guide to set up your Layer N IF-006 Wireless Smart Interface.

Materials

Included with your Layer N IF-006

- Layer N IF-006 Unit
- Quick Start Guide
- 2x C-Cell Batteries

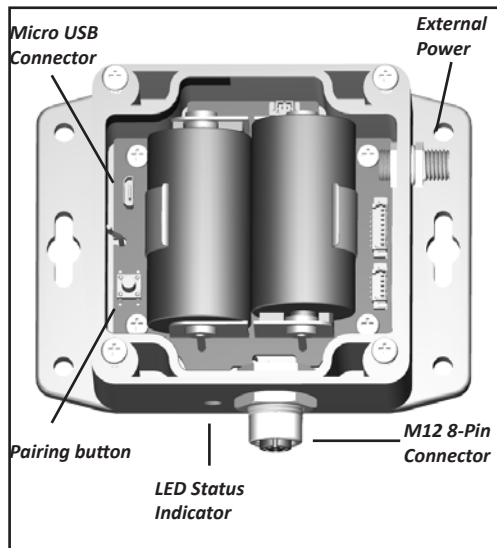
Additional Materials Needed

- Layer N Gateway (**Wireless models only**)
- A registered user account with cloud.omega.com
- Micro USB 2.0 cable
- SYNC Configuration software
 - Downloadable on the OMEGA website
- PC or Laptop with an open USB port running SYNC
- Layer N Smart Probe
- Philips screwdriver

Before you Begin

Before you begin setting up your IF-006, ensure the following prerequisites are met:

- Navigate to cloud.omega.com on any device with a web browser and sign in to your account.
- Ensure your Layer N Gateway is powered on and connected to your registered Layer N Cloud user account.



LED Status Indicator

Refer to the following table for a description of the different LED statuses of the IF-006 unit.

LED Color	Status
Amber (Solid)	IF-006 powered on; not connected to Gateway
Green (Blinking)	IF-006 in Pairing Mode
Amber (Blinking)	IF-006 searching for Gateway
Green (Flash)	IF-006 communicating to Gateway
Red and Green (Blinking)	Password Error

Layer N IF-006 Setup

Step 1: Attach your preferred Layer N Smart Probe to the M12 8-pin female connector of the IF-006. (Some smart probes may require an M12 interconnect cable or additional accessories)

Step 2: If you are attaching an external probe or sensor to your Layer N Smart Probe, such as a thermocouple, attach it now.

Step 3: Use a Philips screwdriver to remove the 4 screws on the top cover of the IF-006 unit.

Step 4: Insert 2x C-Cell batteries into the battery compartment or plug in an external power source (external power only available on certain models).

The **LED Status Indicator** on the IF-006 unit will blink an amber light indicating that the device has been successfully powered on and is searching for a Layer N Gateway.

Configuring with SYNC

Step 1: Launch the free SYNC configuration software on your PC or laptop and connect your Layer N IF-006 using a micro USB 2.0 cable.

Step 2: Once your Layer N IF-006 and Smart Probe are connected to SYNC, click the **Device Settings** tab.

Device Settings

Step 3: (*North American version only*) You may enable High Power Mode by navigating to **Device Settings**, clicking **Additional Settings** under **Interface Settings**. Check the **High Power Mode** box to enable it.



Step 4: Click the Inputs/Outputs tab to configure the Layer N Smart Probe attached to your IF-006 unit. See the user documentation for your Smart Probe for more information on how to configure your Smart Probe.

Connecting to your Layer N Gateway

Step 1: Push the pairing button once on your IF-006. The LED Status Indicator will blink green indicating it is in Pairing Mode.

Step 2: Quickly push the pairing button once on your **Layer N Gateway** and the LED on the Gateway will blink green indicating the Gateway is in Pairing Mode.

When the IF-006 has been successfully paired to your Layer N Gateway the IF-006 LED will stop blinking.

The IF-006 LED will flash a green light each time data is sent to the gateway.

Once you have completed the pairing process, you may use a Philips screwdriver to replace the cover on your IF-006.

Note

Note: The number of measurements displayed depends on the type of sensor purchased and the frequency of measurement updates depends on your Layer N Cloud subscription level.

Layer N Cloud Interface

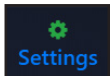
Once your Layer N IF-006 has successfully paired your Gateway, your IF-006 and the attached Smart Probe will appear on the Layer N Cloud interface and begin transmitting data.



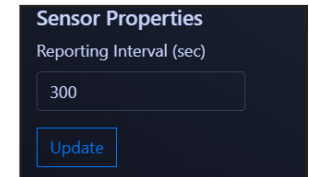
The transmission interval can be adjusted from the Layer N Cloud interface.

Step 1: From your Layer N Cloud homepage, click on the IF-006 unit whose transmission interval you wish to adjust.

Step 2: Click the **Settings** icon.



Step 3: Adjust the **Sensor Properties** to fit your configuration needs.



Congratulations! You have successfully connected your Layer N IF-006 to your Layer N Ecosystem.