

Introduction

Use this Quick Start Guide to set up your HANI™ Clamp Temperature Sensor. For additional information regarding your HANI™ Clamp Temperature Sensor, refer to the User Manual available on the Omega website.

Materials

Included with your HANI™ Clamp Temperature Sensor

- HANI™ Clamp Temperature Sensor Unit
- Quick Start Guide

Additional Materials Needed

For a 4-20 mA Output Connection:

- 4-20 mA wire connection with 8-pin M12 connector *or* OMEGA M12.8-S-F-FM Field Mountable 8-pin M12 connector (Sold Separately on the OMEGA website)

For Omega Link Ecosystem Connection:



Important: An Omega Link Smart Interface is required to connect your HANI™ Clamp Temperature Sensor to SYNC configuration software.

- A Windows OS PC
- SYNC configuration software
-Downloadable on the Omega website
- Omega Link Smart M12 to USB Cable (IF-001) or another Omega Link Smart Interface
- Omega Link Gateway
- A registered user account with cloud.omega.com or a qualifying **Omega Enterprise Gateway** license

For Ad-Hoc Temperature Measurement:

- Computer/Laptop with Windows OS
- SYNC configuration software
- Omega Link Smart M12 to USB Cable (IF-001)

Optional Material:

- USB Isolator
- IF-001 M12 to USB Serial cable to change device configuration setting (*i.e. temperature range scaling, pipe material, pipe diameter, analog output error settings, etc.*)



Important: If the HANI™ Clamp Temperature Sensor is being powered with a 4-20 mA connection and will be connected to SYNC simultaneously, a USB Isolator **must** be used between the user PC and the HANI™ Clamp Temperature Sensor to avoid false readings and potential damage to the unit.

HANI™ Clamp Temperature Sensor Setup

Setting up a HANI™ Clamp Temperature Sensor in the field is quick and easy. Follow the instructions below:

Step 1: Mount the HANI™ Clamp Temperature Sensor on the underside of the pipe.

Step 2: Insert and hook the clasp into the cam mechanism.

Step 3: Pull the cam mechanism to tighten the HANI™ Clamp Temperature Sensor securely on the pipe.

4-20 mA Output Plug and Play

The HANI™ Clamp Temperature Sensor can easily be integrated to an existing analog system in a few steps.

Step 1: Attach an 8-pin female M12 connector to your 4-20 mA analog cable (see wiring diagram - only pins 1 & 6 are needed for loop power setups), then connect to the male 8-pin M12 connector on the HANI™ Clamp Temperature Sensor.

The HANI™ Clamp Temperature Sensor will immediately begin reporting temperature readings.

Omega Link Smart Interface Connection



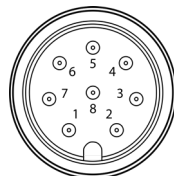
Important: SYNC configuration is only necessary if you will be changing the following: Pipe diameter, pipe material type, pipe conductivity, or to scale output readings. Ensure Omega's SYNC configuration software is downloaded, setup, and running before continuing. Ensure you have an Omega Link Smart Interface compatible with your sensor.

The HANI™ Clamp Temperature Sensor can easily be configured using an Omega Link Smart Interface and SYNC configuration software.

Step 1: Connect the HANI™ Clamp Temperature Sensor to an Omega Link Smart Interface or connector cable.

Step 2: Connect the Smart Interface to a Windows PC running SYNC.

M12 8-Pin Connector Wiring Diagram




	Name	Function	Wiring
Pin 1	Loop -	4-20 mA Return	4-20mA
Pin 2	INTR	Interrupt Signal	Omega Link
Pin 3	SCL	I2C Clock Signal	Omega Link
Pin 4	SDA	I2C Data Signal	Omega Link
Pin 5	Shield	Shield Ground	Omega Link
Pin 6	Loop +	4-20mA Source	4-20mA
Pin 7	GND	Power Ground	Omega Link
Pin 8	3.3VDD	Power Supply	Omega Link

*Pin 5 (Shield Ground) and Pin 7 (Power ground) must be isolated.

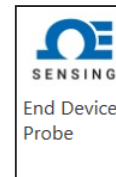
SYNC Configuration

Once the HANI™ Clamp Temperature Sensor is connected to the PC running SYNC, the software will automatically detect the sensor and begin displaying temperature readings.

If SYNC does not automatically detect your device, follow these steps:

Step 1: Click on the  icon located on the top left of the SYNC interface.

Step 2: Select End Device / Probe and click **Next**.



Step 3: Select your **Communication Interface** type from the dropdown and set your preferred Command Timeout, Device Address, and Device ID / Port.

Step 4: Click **Finish**.

To customize the pipe diameter, pipe material type, or pipe conductivity navigate to the **Inputs** tab in SYNC to adjust the settings. A list of Pipe Materials that are currently supported is provided in the following section. See the User's Manual for detailed instructions.



Important: HANI™ Clamp Temperature Sensors come preconfigured for **PVC** pipe materials with standard wall thickness. If your pipe material is something other than PVC and/or has a non-standard pipe thickness, please connect to SYNC to configure appropriately. Sanitary device pipe thickness should not need to be changed. Industrial pipe devices come preconfigured for Schedule 40 (standard) thicknesses.

Type	Material
PVC	Polyvinyl Chloride
CPVC	Chlorinated Polyvinyl Chloride
PP	Polypropylene
PFA	Perfluoroalkoxy Alkanes

To scale output readings or set analog output error defaults, navigate to the **Outputs** tab in SYNC to adjust the settings. See the Product User's Manual for detailed instructions.

Pairing to an Omega Link Gateway

Refer to either the Wireless Pairing or Wired Pairing instructions to pair a HANI™ Clamp Temperature Sensor to an Omega Link Gateway. Before continuing to the pairing instructions, ensure the following prerequisites are met:

- Ensure that the Omega Link Gateway has been properly setup, powered on, and is in close proximity.
- (For Wired pairing) Ensure the user has access to a PC and the internal Gateway UI (refer to the Omega Link Gateway manual for instructions on how to access the Gateway UI)

Wireless Pairing

Pairing a wireless Smart Interface (IF-006) and attached HANI™ Clamp Temperature Sensor is made easy with a one-button pairing system between the IF-006 and the Omega Link Gateway.

Step 1: When the HANI™ Clamp Temperature Sensor and relevant accessories have been securely connected to the IF-006, push the pairing button once on the IF-006. The LED Status Indicator will blink green indicating it is in Pairing Mode.

Step 2: Quickly push the pairing button on the Omega Link Gateway. The LED on the Gateway will blink green indicating the Gateway is in Pairing Mode.

When the IF-006 has been successfully paired to the Omega Link Gateway, the LEDs will stop blinking on both devices. Readings for the newly added sensor will then appear on the Omega Link Cloud or Omega Enterprise Gateway interface associated with the registered Gateway.

Wired Pairing

A wired HANI™ Clamp Temperature Sensor connected directly to an Omega Link Gateway with an IF-001 cable or IF-002 will need to be added to the Gateway Internal User Interface. See the Omega Link