

# Introducing HANI™



## High Accuracy Non-Invasive Temperature Sensor

Monitor the temperature of in-pipe fluid media in your process piping system with our new HANI Clamp Sensor. Easy-to-install with zero downtime, this sensor is a game-changing product for industrial temperature measurement and control.

### No Probes. No Maintenance. No Downtime. No Problems.

Get the accuracy of invasive immersion sensors without any of the installation or sensor relocation challenges. Measuring in-pipe fluid temperature has never been easier!



### Key Benefits & Features

#### Ease of installation & relocation: install HANI clamp in seconds

No drilling, no welding, no downtime.

#### Non-invasive & non-contact measurement

- Mounts easier than a surface sensor
- Removes easily without damage/residue
- Zero contamination risk
- No risk of sensor damage or buildup
- Ease when using a PIG product recovery system or CIP

#### High Accuracy and fast response times

- Performs like an invasive sensor
- $t(63)$  5 sec or  $t(90)$  10 sec response time

### Available in Industrial and Sanitary options

**Process Temperature Range:** 32 to 212°F (0° to 100°C)

#### Accuracy:

**Sanitary Metal Pipes:**  $\pm 0.5^{\circ}\text{C}$

**Industrial Metal Pipes:**  $\pm 0.5^{\circ}\text{C}$  to  $\pm 1.0^{\circ}\text{C}$

**Output:** 4 to 20 mA

**Connection Type:** M12 8-pin, IP65

### Installs in Seconds



STEP 1

**Clamp onto pipe**



STEP 2

**Connect cable to output device**



STEP 3

**Start temperature reading**



### HANI vs Traditional Solutions

	Clamp Sensor	Invasive Sensor	Surface Sensor*
High accuracy	✓	✓	✗
Fast response time	✓	✓	✗
Easy to install	✓	✗	✓
Easy to relocate	✓	✗	✗

\* measures outside temperature of the pipe.



Only HANI clamps on in seconds, reducing cost, maximizing uptime and facilitating process troubleshooting.



## Common Applications

- **New and retrofitting existing systems** - Lower the total cost of ownership and reduce contamination risk without sacrificing performance by upgrading to a HANI™ Clamp Sensor.
- **Quality control & ad-hoc sensing** - Clamp-on the sensor in seconds and connect to your laptop or PC for readings anytime - anywhere.
- **Verify existing invasive sensors** - With accuracies comparable to most state-of-the-art invasive sensors, the HANI™ Clamp Sensor can easily be placed next to an invasive sensor to verify the accuracy or determine the drift of the invasive sensor.

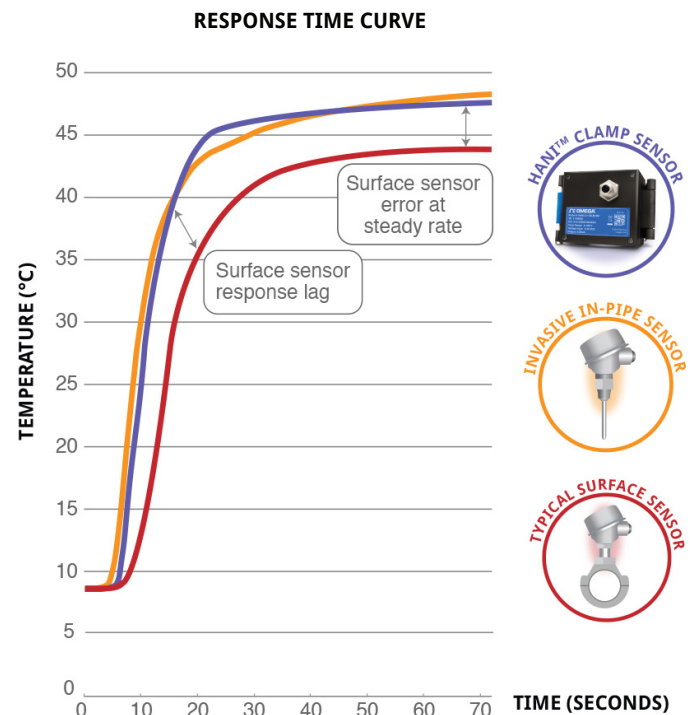


## What Customers are Saying

**"So easy to install!!** We have been using in line RTD's and thermocouples for years, this product has given us the flexibility of where to monitor temps without the costly modifications and downtime of moving a fitting for our existing products, and then the cost of having to rewire them if needed. So worth it to switch!"

**"Wonderful Product!** Hooking up the Hani Clamp to the pipe literally took 2 seconds - placed the unit on the pipe, took the band around the pipe and clasped it. It hugged the pipe just like it was made for it - because it was! It is a pleasure using this instrument. The readings are dead on accurate. We were able to get the readings on a laptop since we chose not to use the 4 to 20 mA feature. It is the best and as far as we know the only product available for taking non intrusive temperature readings from stainless pipes".

**"Expertly-Designed, Robust Sensor.** This non-invasive is a joy to work with right out of the box. Within two minutes I had the software downloaded, the sensor/clamp in place, and was reading temps; more accurately than and faster than the device installed in parallel I should add. Putting the device through its paces, it's water tight, chemical resistant, and to some degree fall proof. From a sanitary perspective I enjoy that this sensor is non invasive, the brewery industry must maintain sanitary practice; any chance to remove something from a sanitary pathway - I take it. The HANI is now my go-to audit sensor around the brewery. I've also had nothing but superior customer service from Omega, their entire team top to bottom is a pleasure to work with. I felt like a device seemingly so simple like this should already exist but it doesn't. Bravo Omega. You truly are sensing great things. Will buy again and again".



1.  $t_{63}$  is the time constant or response time required to reach 63.2% of the final value after an instantaneous temperature change.  $t_{90}$  is the response time required to reach 90% of the final value after an instantaneous temperature change.

