

Heartbeat Technology Radar Accuracy Index

Keeping an eye on your accuracy

What is the Radar Accuracy Index?

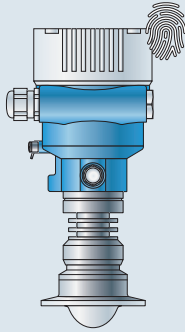
Heartbeat Technology Radar Accuracy Index (RAI) is a patented technology that assesses the reference accuracy of a Micropilot without process interruption. The Heartbeat Technology's verification concept with RAI is third-party certified and traceable according to ISO 9001.



Are you facing high calibration efforts in your process? With the new Heartbeat Technology Radar Accuracy Index of Endress+Hauser you can:

- Extend your calibration intervals between wet calibrations
- Increase confidence in your radar measurement between wet calibrations
- Fulfil the traceability requirements according to ISO 9001 – third-party certified

Manufacturing

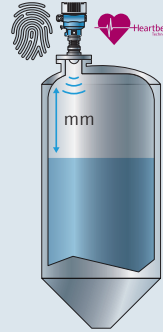


RAI fingerprint is measured and stored in the device during production.



RAI deviation is expressed in the Heartbeat Verification report and indicates a possible measurement drift compared to factory condition.

Application



RAI measured as a part of Heartbeat Verification on site and without process interruption

How does RAI work? On every radar chip is an electronic part generating and measuring frequencies – called quartz oscillator. Each oscillator has a unique reference state which is defined and stored in the device like a fingerprint during the production process. This fingerprint is traceable to the factory test/calibration. During a Heartbeat Verification, the device-specific reference fingerprint is

compared to the current oscillator's state in the process. Thereby the RAI-deviation is measured. If an excessively high deviation is detected, the report will give an indication and corrective measures have to be taken. If the Heartbeat Verification with RAI is passed, wet calibration cycles can be extended as the radar fulfills its specifications with high probability.

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