

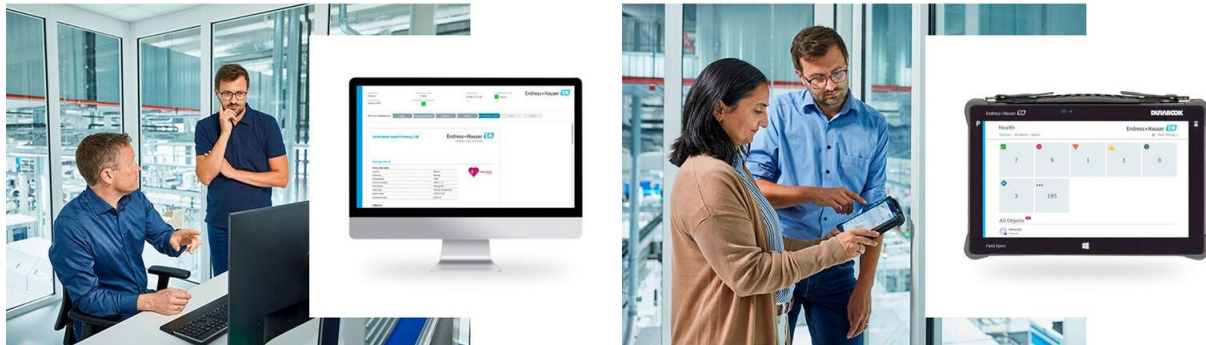
Smart instrumentation through Heartbeat Technology

In-depth device insights for process optimization and condition monitoring

Keeping productivity high, while at the same time lowering operating and maintenance costs, sounds like a familiar challenge to you? You aim to comply with legal requirements as well as ensure product quality and safe operations? To support you in all these situations, we developed Heartbeat Technology. Consisting of diagnostics, verification and monitoring functions, it makes our smart instrumentation even smarter, by providing you with reliable, in-depth sensor and process insights.



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Benefits

- **Increased measuring reliability and safety**
Highest confidence in device performance under various operating conditions due to outstanding diagnostic coverage and developmental compliance with international standards (Heartbeat Diagnostics)
- **Higher efficiency and plant uptime**
Efficient operations through timely, clear and standardized diagnostic messages according to [NAMUR NE 107](#), providing easy-to-follow recommendations for remedial actions (Heartbeat Diagnostics)
- **Certified verification of measuring instruments**
Guided procedure for in-situ and traceable verification of measuring instruments acc. to ISO 9001 at the push of a button, without interrupting the process – with minimal effort and without device removal (Heartbeat Verification)
- **Enhanced productivity while ensuring compliance**
Third-party attested verification concept and automatically generated verification reports enable optimization of calibration and proof test cycles in a compliant manner (Heartbeat Verification)
- **Predictive, intelligent and timely measures**
Condition monitoring capability for process optimization and timely prediction of maintenance needs (Heartbeat Monitoring)

All these benefits and functionalities are available across our product portfolio and offer easily understandable device and process insights, e.g., the [detection of build-up](#) formation, which enables the optimization of cleaning intervals. Once our smart instruments are connected to your control system, management system or the cloud, additional data can be gained conveniently. Also, Heartbeat Verification can be executed centrally for numerous field devices, and a lot more.