

OndoSense offers micrometer-precise, real-time capable radar sensor with Profinet interface

Lightning-fast measuring, easy commissioning, proven micrometer precision: The new OndoSense apex radar sensor now offers real-time measurements & Profinet.

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/EINPresswire.com/ -- Lightning-fast measurements, easy commissioning, dependable micrometer precision: OndoSense presents the latest generation of its high-performance

distance radar for automation in harsh industrial environments. The [OndoSense apex radar distance sensor](#) for ultra-precise, reliable [distance measurement](#) now offers a Profinet interface and an even higher measuring rate of 500 Hz. With this real-time measuring speed and a unique measuring precision of up to $\pm 1 \mu\text{m}$, the OndoSense apex is further strengthening its position as

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Rainer Waltersbacher

the most powerful industrial distance sensor on the radar market. The sensor can now be integrated to the PLC even more easily than before via Profinet. The application spectrum of the OndoSense apex radar sensor ranges from micrometer-precise distance measurements and complex dimensional measurements to highly accurate level, height and throughput measurements as well as determining of the position of hidden objects (e.g. behind plastic sheets or packaging). Thanks to its wide measuring range of 0.1 to 40 meters, the OndoSense apex can be used reliably both at close range and over longer

distances. The robust radar sensor is suitable for a variety of industries – from the steel, metal and mining industry to mechanical engineering, the energy sector or transport and logistics.

Highly accurate measurement results in harsh, complex applications



OndoSense apex radar distance sensor

“Thanks to the unique reliability, robustness and precision of our radar sensor, customers can achieve high productivity gains in complex applications in a very short time – e. g. in the width and profile measurement of semi-finished metal products or the level measurement of molten aluminium, copper or steel. The OndoSense apex enables automation even in harsh industrial environments with high demands regarding measurement speed and precision. Based on the feedback from our customers, we have now been able to optimize again the high level of performance and further simplify commissioning,” says Rainer Waltersbacher, Co-CEO of OndoSense.

Profinet interface: uncomplicated integration into existing systems

„Providing high-performance radar sensors that are easy to commission and enable greater productivity through automation: this is what we are committed to at OndoSense – and we have already convinced many customers. With the new Profinet interface of the OndoSense apex, we have now reached an important milestone, because customers can integrate our radar sensor ‘plug and play’ into the PLC,” explains Mathias Klenner, Co-CEO and founder of OndoSense. In addition to the Profinet interface, OndoSense also offers variants with an analog current interface (4-20 mA) and digital switching outputs (PNP/NPN).

Optical calibration aid enables easy sensor alignment

The new OndoSense apex has an optical calibration aid that is visible from all sides and is attached to the corners of the housing: 4 LEDs help to easily align the sensor with the target object and achieve the strongest possible radar signal. This means that the radar sensor is quickly ready for use at any time and without specialist knowledge – even for the most difficult measuring tasks.

Micrometer precision and real-time capable measurement frequency

“We have been able to increase the measurement rate of the OndoSense apex to 500 Hz, thus enabling real-time, synchronized line operation. With this measurement speed and the unique measurement precision of up to $\pm 1 \mu\text{m}$, the OndoSense apex is currently the most powerful industrial distance sensor on the radar market,” says Axel Hülsmann, OndoSense CTO and founder. With a radar lens opening angle of just ± 1.5 degrees, which is very narrow for radar, the sensor delivers stable, reliable measurements with an extremely small measurement spot.

Reliable measurement results – even in the presence of steam, dust, heat or vibrations

Thanks to robust, insensitive radar technology and smart radar algorithms, the OndoSense apex offers highly precise, reliable measurement results - even in the presence of dirt, smoke, steam, rain, heat, vibrations, poor lighting conditions or rough surfaces. The timeless, hexagonal aluminum housing of the OndoSense apex radar sensor is designed to reduce potential

interference reflections to a minimum in order to maximize the stability of the measurement. With its dust-tight, jet-proof protection class (IP 67) and its durable PTFE lens, the robust distance radar is the ideal choice for adverse production environments. In extreme operating conditions, optionally available heat shields (with connection for air cooling, if required) offer maximum protection against very high temperatures or extreme dirt build-up. This means that the OndoSense apex radar sensor always achieves reliable measurement results.

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