Spireon introduces trailer cargo sensor

Spireon's FleetLocate Cargo Sensor with IntelliScan technology combines multiple sensors within a single device.

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Spireon, a vehicle intelligence company, introduced a FleetLocate Cargo Sensor with IntelliScan sensing technology, providing accuracy in visualizing cargo load status. The patent-pending IntelliScan technology uses a combination of sensing methods, including optical imaging and laser time of flight, to provide trailer fleet managers with a more precise picture of what is inside every trailer.

"The accuracy of IntelliScan technology is vastly superior to anything on the market today, and the industry has been in dire need of a better solution for cargo monitoring," said Rick Gruenhagen, chief technology officer at Spireon. "Our new cargo sensor can deliver the precise readings trailer managers need, saving time, reducing detention and maximizing resources to drive bottom line results."

Ultrasonic detection—the current industry standard in cargo sensors—is heavily impacted by conditions inside the trailer, such as temperature, humidity, cargo type and distance between the sensor and cargo. For example, cargo that includes soft materials like foam or cotton absorb

sonic waves, affecting accuracy of readings. Any material that is placed directly against an ultrasonic sensor blocks sonic waves, potentially indicating an empty cargo load by mistake.

Spireon's new FleetLocate Cargo Sensor with IntelliScan technology is designed to resolve these issues by combining multiple sensors within a single device, and adding sophisticated processing power to the sensors themselves. IntelliScan uses lasers for time of flight measurement, eliminating problems associated with cargo type and proximity. Laser technology is highly reliable and widely used in other industries, such as for pre-crash sensors in automobiles where it detects pedestrians or other objects in the way of the vehicle. However, lasers alone have range limitations, so Spireon also incorporated a camera in the device, making the new cargo sensor the first to combine time of flight and optical imaging with advanced algorithms to accurately detect cargo load. As a result, the Spireon solution will capture the entire 53-foot trailer, regardless of environmental conditions or varying cargo types.

"All other cargo sensors use only one type of technology and very limited processing capability. Our new IntelliScan-based cargo sensor is a powerful computer in itself, utilizing advanced algorithms to perform analysis of laser and optical readings in real-time," said Reza Hemmati, senior director of product management at Spireon. "By combining data from the device with the power of our NSpire platform for additional analysis, we can deliver the most accurate information to customers, which allows them to make the best business decisions as quickly as possible."

With IntelliScan technology and FleetLocate's advanced reporting and alerts, trailer operators will be able to better monitor cargo, manage detention and improve service to shippers, maximizing trailer utilization and accelerating turns. Even carriers that operate in humid climates or carry soft goods will have a reliable sensor that can accurately monitor cargo loads. Further, the use of optical imaging paves the way for potential future enhancements that support photo capture or real-time visualization of trailer contents.

"Inefficient cargo management kills profitability for all fleet managers—truckload, LTL and private fleets alike," said Roni Taylor, vice president of strategy and business development at Spireon. "We are thrilled to offer our customers ground-breaking IntelliScan technology that will give them a virtual eye inside the trailer to improve detention management and trip planning, both critical for competitiveness in the market."

FleetLocate Cargo Sensors with IntelliScan are already installed with a select group of Spireon customers, and will be generally available in Q3-2018.

https://www.vehicleservicepros.com/shop-operations/data-telematics/onboard-computers-and-telematics/press-release/21012485/spireon-spireon-introduces-trailer-cargo-sensor