Spireon recently introduced a new FleetLocate Cargo Sensor with IntelliScan sensing technology, which the company said provides unprecedented accuracy in visualizing cargo load status.

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Spireon introduces IntelliScan fleet cargo sensor

TBB Staff | Jul 12, 2018

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The patent-pending IntelliScan tech 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’s 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 a full cargo load by mistake.

Spireon’s new FleetLocate Cargo Sensor with IntelliScan is designed to resolve these issues by combining multiple sensors within a single device, and adding 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 reliable and widely used in other industries, such as for pre-crash sensors in automobiles, where it detects pedestrians or other objects in the vehicle’s way.
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,” said Reza Hemati, senior director of product management at Spireon. “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.

“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.”

FleetLocate Cargo Sensors with IntelliScan are already are installed with a select group of Spireon customers, the company said, and will be generally available in the third quarter of 2018.

“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.”