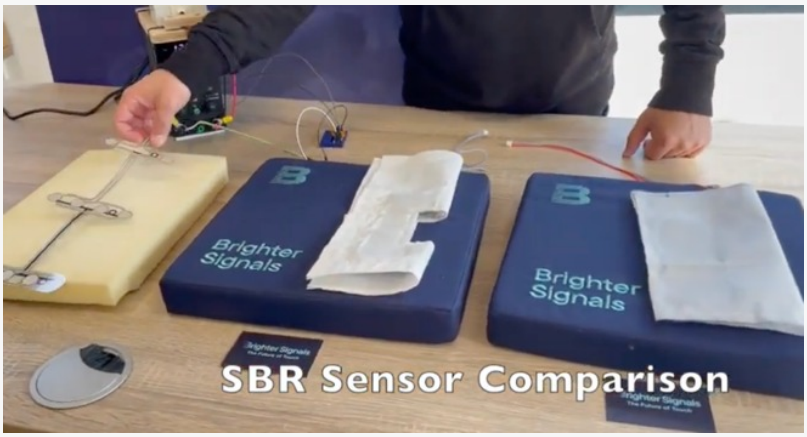
Brighter Signals Introduces SBR Sensor: Better Accuracy, Same 2-Pin Footprint

New fabric-based sensor is a rolling-change for existing SBR systems — using richer data to close a safety gap for small occupants legacy sensors miss.



Two Pin SBR Sensor Comparison

AMSTERDAM, NETHERLANDS, June 10, 2026 /EINPresswire.com/ -- Brighter Signals (https://www.brightersignals.com) today announced a new Seat-Belt Reminder (SBR) sensor, building on the global momentum of its ground-breaking occupancy classification platform now in active evaluation with leading OEMs and Tier 1s. The new sensor is a deliberately simpler, lower-cost product engineered as a direct, rolling-change replacement for today's 2-pin SBR sensors — no ECU redesign, no harness change, no integration project. It delivers a meaningful step-up in accuracy at the same price point as the binary detectors that have dominated the category for nearly twenty years.

It also addresses a less-discussed but serious safety gap: legacy SBR sensors frequently miss children, teenagers, and small adults who aren't sitting squarely — meaning the system fails to remind exactly the occupants who most need to be belted. Brighter Signals' improved accuracy and larger sensing area are designed to close that gap.

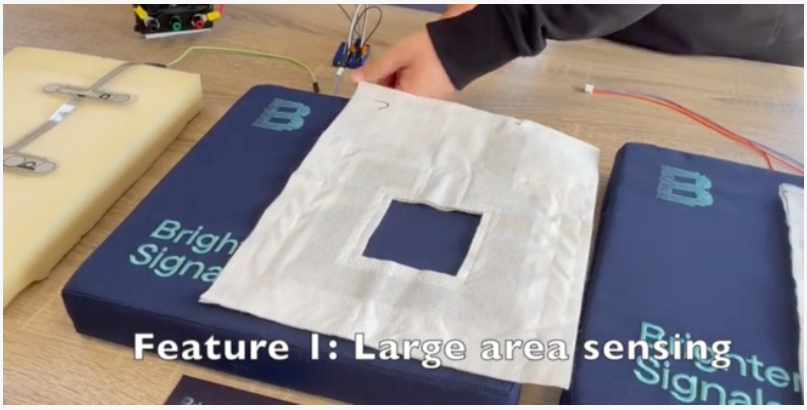
> SBR is one of the most-complained-about systems in the modern vehicle, and the technology underneath it hasn't meaningfully changed in twenty years."
>
> *Andrew D. Klein, CEO*

THE PROBLEM: A CATEGORY THAT HASN'T ADVANCED IN TWO DECADES

Today's SBR systems are built on technology that has barely evolved since the early 2000s. Most are bend-sensors or single-zone pressure sensors that report a binary "weight present / weight absent" signal to the ECU. The result, documented by automakers and consumer complaints worldwide, is a sensor that:

- Fails to reliably detect children, teenagers, and small adults who don't sit squarely — exactly the occupants the system is meant to remind, and the same ones lost during cornering as they

shift away from the sensor's single zone
• Chimes when groceries, a backpack, or a purse is on the seat, and cannot reliably tell a seated occupant from cargo of similar weight
• Suffers from hot-spot wear, drift, and edge-of-sensor failures over the life of the vehicle
• Generates enough false alerts that owners actively look for ways to defeat the system — undermining the safety intent of the regulation



Large Sensing Area

These are not edge cases. They are daily occurrences across the global fleet and a known source of warranty cost, customer complaints, and regulatory risk.

THE PRODUCT: HOW THE BRIGHTER SIGNALS SBR SENSOR IS DIFFERENT

The new sensor is a focused, single-purpose product — not a full occupancy classification system. It does not classify occupants by weight class or distinguish child seats. It captures richer, spatially distributed weight data and uses it for a substantially more accurate belted/unbelted decision:
• Weight distribution, not just weight. Where a legacy SBR sensor reports a single threshold crossing, the Brighter Signals sensor reads how load is distributed across the full seating surface. A human body produces a characteristic pattern that a backpack, grocery bag, or box does not — and that difference is what the SBR logic keys on.
• Reliable detection of small or off-center occupants. The larger footprint recognizes children, teenagers, and small adults even when they aren't seated squarely, and continues to detect those who shift during cornering — closing a well-known coverage gap.
• Drop-in compatibility. Fits existing 2-pin seat ECUs without modification — no re-architecting electronics, requalifying the harness, or changing software.
• Cost-neutral and durable. Priced head-to-head with incumbent binary sensors. The fabric construction has no moving parts or pressure points, and is designed to perform consistently over the service life of the vehicle.

FROM THE TEAM

Andrew Klein, Co-Founder and CEO of Brighter Signals, said:
"SBR is one of the most-complained-about systems in the modern vehicle, and the technology underneath it hasn't meaningfully changed in twenty years. OEMs have had to balance customer satisfaction with regulatory compliance — and until now that meant living with false chimes and conservative calibrations, because the only alternative was a far more expensive and complicated sensor system. We've removed that trade-off. Our SBR sensor drops into the

existing 2-pin footprint, costs no more than the binary sensor it replaces, and brings a meaningful step-up in accuracy. For an OEM, this is the rarest kind of upgrade — better performance, same cost, no integration project."

Edward Shim, Co-Founder and CTO of Brighter Signals, who invented the underlying sensor technology, added:
"Legacy SBR sensors try to infer a human being from a single number — typically whether weight crosses a threshold. That isn't enough to tell a small adult from a backpack, or to recognize a child who isn't sitting squarely. Our fabric sensor doesn't try to do occupant classification — that's a different product. It captures enough about how weight is distributed across the surface to make the binary belted/unbelted decision far more reliably. Our POCs are showing false alarms substantially reduced and small occupants reliably detected — without changing the ECU, the harness, or the price."

PRODUCT FAMILY

The SBR sensor shares the same fabric-sensor substrate as the company's occupancy classification (OC) system, but is a distinct, simpler product. The OC system uses multiple pressure sensors, capacitance sensing, and seat-back proximity strips with a classification algorithm to support airbag-deployment decisions under FMVSS 208, Euro NCAP, and UN R94/95. The SBR sensor does none of that — it does one thing well, giving OEMs a path to better SBR performance without committing to a full OC program.
AVAILABILITY

The SBR sensor is available now for OEM and Tier 1 evaluation, with active proof-of-concept programs underway with multiple global vehicle manufacturers. It is suitable for new vehicle programs and rolling-change upgrades on platforms already in production. Through its manufacturing partnership with Changshu, China-based CAIP Ltd, production is scalable to global OEM volumes under established automotive quality standards.

ABOUT BRIGHTER SIGNALS

Brighter Signals develops fabric-based sensor technology for the automotive industry, enabling occupant detection, classification, position sensing, and seat-belt reminder applications. The patented platform measures weight, pressure, and proximity through voltage and capacitance differentials in fabric-integrated sensors, delivering regulatory-grade performance at a fraction of the cost, weight, and complexity of legacy systems. Headquartered in Amsterdam, Brighter Signals serves global OEMs and Tier 1 suppliers across automotive, robotics, and healthcare.

www.brightersignals.com
Watch the SBR sensor in action: youtube.com/watch?v=G42Xdhv25vc

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