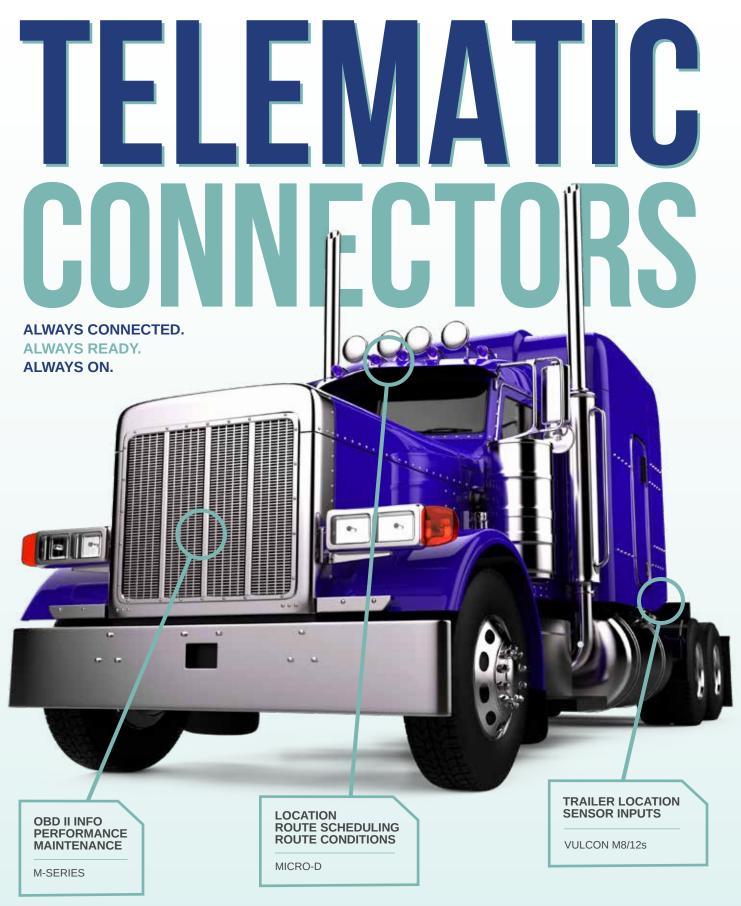
NORCOMP



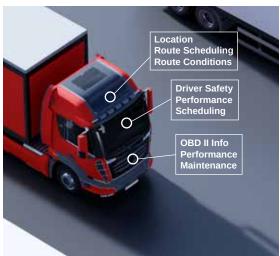
ALWAYS ON SENSING.

Telematics sensors carry hyper-detailed data, giving your team a clearer view into fleet, equipment, and shipping operations than ever before.

Using the wrong connectors can lead to poor data quality and lost connections. To transmit important insights 24/7/365 from all over the globe, the sensors that collect realtime data must be one thing: "always on."

NorComp connectors are ultra-reliable, protected against harsh conditions, and built to endure vigorous onboard vibrations. Whether you're halfway across the globe or just across town, reliable telematics connectors maintain signal connectivity, so you always have eyes on what's most important to your business.





TELEMATICS SENSOR Adoption is on the move



of fleets use telematics to monitor vehicle and asset location



in fuel costs based on predictive analytics gathered via telematics sensors

3,000 Shipping containers

without tracking capabilities were lost in 2020

\$45 MILLION

The value of cargo stolen in September 2021

VS.



TELEMATICS CONNECTORS THAT Support real-time insight Even when you're out of sight

Sensors are always on the move: through the desert, tundra, or on the high seas. With reliable connectivity, you'll feel like you're on-site—even from thousands of miles away.

TRADITIONAL TELEMATICS

Fleet Management

An armada of sensors fuels the insights that drive modern fleet management. The right connectors stay locked in to support real-time data feeds, despite jarring road vibrations. Continually monitor driver performance, improve route efficiency, and enact proactive maintenance plans to reduce downtime.

Heavy Equipment & Asset Tracking

From unsecured worksites to remote locations, real-time GPS location data pinpoints the location of vital equipment. To be your round-the-clock eyes on the ground, you need ultra-reliable connectors that can stand up against shock, vibration, and a wide range of temperatures.

Smart Shipping Containers

U.S. ports alone processed over 50 million shipping containers in 2021. Mitigate theft and loss risk by knowing the exact location of cargo all throughout its journey at sea. Don't wait until containers reach their destination to discover issues. With sea-ruggedized connectors in place, you can stay fully apprised of temperature swings, potential damage, and door status.

Marine GPS

Boats, ships, and fishing vessels—connectors on the water need to resist salt, liquids, and corrosion damage. Safeguard seafaring sensors against damage, so you have access to their precise location 100% of the time.

Military Telematics

Keep tabs on mission-critical equipment when it's needed most. Connectors carrying strategic operation signals can't risk disruption. Defend against harsh conditions like sand, liquids, and heavy-duty vibration.

SENSING TELEMATICS

Temperature

"See" inside temperature-controlled fleets to constantly monitor cold chain requirements.

Humidity

Get immediate alerts if humidity levels exceed allowances.



PROTECT DATA AND POWER FLOW WITH RUGGEDIZED, WATERPROOF CONNECTORS



Proprietary Sealing Technology

Endure Extreme Shock and Vibration

At sea, up in the air, or on the roads, sensors undergo significant shock and vibration. Connectors with internal latching, solderable contacts, or screw retention mechanisms keep data and power flowing even in the face of intense jostling.

IP67 Moisture Protection

Rain, dust, salt spray—telematics sensors are on the move, traveling through constantly shifting climates. They must be ready to take on changing conditions like fierce storms, heavy ocean spray, and short-term submersion. Internally sealed waterproof connectors protect vital telematics sensor systems from the elements, while stainless steel designs limit corrosion.

Rated For High Mating Cycles

Telematics sensors that are frequently connected and disconnected undergo significant wear and tear. Connectors with machined contacts are rated for higher mating cycles, reducing failure and increasing product lifetime.

Compact Footprint

Sensors collect a skyrocketing level of detail, increasing the number of devices tapping into the PCB. Telematics sensors must be significantly ruggedized without taking up too much space. Internal seals and latching devices eliminate bulk to better slot into your enclosure and PCB designs.

OPERATING APPLICATIONS

APPLICATION	FLEET Management	HEAVY EQUIPMENT & Asset Tracking	SMART SHIPPING Containers	MARINE GPS	MILITARY Telematics
Temperature	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Shock/Vibration	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Pressure				\checkmark	
Corrosion	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Explosion					\checkmark
Liquids	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Dust	\checkmark		\checkmark	\checkmark	\checkmark

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Telematic Connectors

TELEMATICS SYSTEM FOR MATERIAL HAULERS

Equipment aboard heavy-duty haulers is exposed to heavy vibration, moisture, dust, and temperature extremes. Reliable communications drive this construction technology business—they can't let the elements impede operations. A high-performance, ruggedized connector means cement trucks, asphalt, and other critical construction materials get to worksites on-time every time.

Why NorComp

Our team at NorComp designed a series of custom M8 & M12 pre-wire panel mount assemblies rugged enough to combat the challenging conditions that pummel the vehicles that transport heavy-building materials. We further customized the suite of connectors with non-standard thread configurations to meet the customer's precise housing requirements. Through a collaborative effort with other suppliers, we were able to source the various wire-to-board connectors needed to propose a comprehensive turn-key solution within a tight timeframe.





SMART SHIPPING CONTAINERS READY FOR THE HIGH SEAS

Shipping containers endure a lengthy journey at sea. Waiting until they reach their destination to check their status is fraught with risk. A global leader in smart cargo solutions helps logistics teams monitor their shipments with real-time GPS, temperature, and humidity monitoring and control.

This customer needed D-Sub connectors that could withstand being out at sea for the long haul. An IP67 rating was a must-have: these connectors needed to be impervious to water sprays and defend against salt, humidity, and other oceanic conditions. But the customer found that many industry-standard IP67 D-Sub connectors were too bulky for their panel. They needed a more compact design with specific mounting hardware. Through an in-depth understanding of the application requirements, we were able to offer a solution they hadn't considered.

Why NorComp

Our internally sealed SEAL-D minimized the footprint needed to mount the connector for a highly protected, ruggedized system without the bulk.

FLIGHT DECK AVIONICS FOR HIGH-END BUSINESS AIRCRAFT

To combine both GPS and legacy radar data, a world leader in GPS technology required high pin count connectors that were very rugged and reliable. Their baseline platform included many high-density D-Sub connectors that had to withstand the vibration, temperature, and humidity changes associated with aircraft operations.

Why NorComp

To get the FAA stamp of approval, this customer had to meet stringent sealing regulations certified during production. This meant any pre-made panel sealing solutions were a no-go. We developed custom PCB profiles to maintain the extremely tight tolerances required by the FAA. In addition, we had to coordinate these precision specs between several design groups. A single point of contact reduces the number of people critical information must pass through, ensuring a more streamlined, tightly coordinated development process.



FIND THE RIGHT CONNECTOR FOR YOUR TELEMATICS PROGRAM

Telematic Connectors

VULCON STEEL

- Available in 3 sizes | 12mm, 8mm, & 5 mm diameters
 - Available in pin counts ranging from 2 to 12 positions
- IP67/IP68 Performance in both mated / unmated conditions
- Solder Cup, Vertical, & Right Angle board mount options
- Cable mount available loose piece or as pre-made cables
- Up to 5 AMP contact rating / -40°C to +85°C
- Full metal shells for EMI/RFI shielding
- A, B, D X & L Codes now available
- M12 connectors available in heavy-duty, ruggedized stainless steel



VULCON STEEL - 4 PIN D-CODE

CDF VERTICAL SOLDER NN-JACKSCREW

NANOOK

- Available in 4 Shell Sizes | (E / A / B / C)
 - Standard Density: 9, 15, 25, 37
 - High Density: 15, 26, 44, 62
 - Combo-D: 12 Variations
- Meets IP67 Performance Requirement Up to 40 AMP Power Contact Rating
- Standard Density 5A High Density 3A Combo-D 20A/40A
- Solder Cup, Vertical Solder, & Right Angle Solder Board Mount Options
- -25°C to +85°C Operating Temperature



15 PIN HD - 781M SERIES

SEAL-D

- Signal / Low Power in 6 standard sizes:
 - Standard Density: 9, 15, 25
 - High Density: 15, 26, 44
- Combo-D / High Power in several configurations
- Solder Cup, Vertical Mount, & Right Angle Board Mount Options
- High Reliability Screw Machined Contacts
- 3 amp / 5 amp / 20 amp / 40 amp Rower Options
- -55C to +105C Operating Temperature Range
- 100% IP Compliant Guaranteed | Made in U.S.A

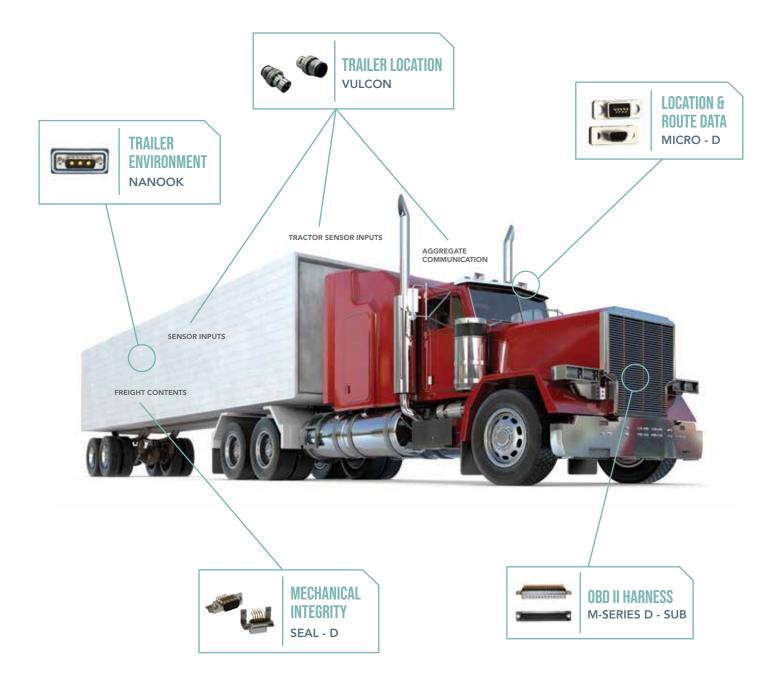


15 PIN 580 SERIES PANEL MOUNT

MICRO-D CONNECTORS

- Robust shielding in a compact footprint
- Less than 1/3 the size of a standard D-Sub
- 9, 15 & 25 pin sizes
- 1 AMP contact rating / -55°C to +85°C
- Machined contacts for increased reliability

ALWAYS CONNECTED. Always Ready. Always on.





TELEMATICS CONNECTORS



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