

veam cannon

We connect passengers  
to safety and reliability.

Proven rail expertise. Global capabilities.



**ITT**

ENGINEERED FOR LIFE

# Engineered with your toughest challenges in mind.

Pounding hail. Roaring winds. Penetrating heat. Blinding sheets of snow. To take on the harshest environmental conditions in rail, you need the most durable and reliable interconnection solutions available—like those from ITT Veam and ITT Cannon.

Backed by the experience and stability of ITT and with combined experience of over 175 years, ITT Veam and ITT Cannon have a history of dedication to innovation within the rail market. As a worldwide manufacturer of interconnect solutions, it's no challenge to respond to you in any location—providing support from the start until your needs are fully met. Through a committed investment of time and money to ongoing research and development, we've become an industry leader when it comes to harsh environment interconnect applications—leading to the most advanced solutions on the market.

## Rolling Stock

Qualified on more than 250 rail programs and having performed for decades on more than 100,000 trains, our connectors are engineered to withstand the harshest environments—especially undercar, coupler and intervehicle connections.

## Railway Infrastructure

An integral part of the infrastructure and electrical control functions on current and next-generation railway systems, our connectors and interconnect systems perform in both on- and off-board applications—providing the safest, most reliable connections for signal and data.

## Productive Partnership

Our standard solutions can be modified to fit your unique needs or in cases when you need a complete interconnect solution our world-class engineers work with you to create a highly reliable, cost-effective design. Every solution has gone through a rigid design and manufacturing process to ensure the utmost reliability and the highest quality.

That's how we connect you to reliability and durability... and passengers to their destinations safely and on time.

### ITT VEAM CONNECTS

Operating 24 hours a day, 365 days of the year, ITT Veam helps this North American transit system deliver 2 billion rides a year.

### ITT VEAM CONNECTS

Designed for speeds up to 400 km/h, this European VHS train counts on ITT Veam to connect passengers to a ride of comfort.



# Delivering the ultimate in performance.

Speeding through the country at 350 kilometers per hour. Zooming through the city. You're not just overcoming engineering challenges, you're conquering the elements to get your passengers—families on holiday, busy commuters, restless students—safely to their destinations. That's what our family of rail connectors was designed to do.



## ITT VEAM CONNECTS

Elevated rapid transit systems from Canada to Malaysia count on ITT Veam to keep the people flowing.

## Meet some of our connectors



### FRCIR SERIES:

These versatile multi-pin connectors are engineered with flame-retardant compounds to operate in the most hostile mass transit environments.



### FRCIR290 SERIES

In heavy duty applications these flame retardant connectors maintain critical power, data and signal integrity by offering exceptional resistance to vibration, water and dust.



### FRCIR M12 SERIES

With the ability to transfer data from Ethernet, WTB and MVB in a single connector, this flame retardant series is ideal for meeting today's increasing data transmission requirements.



### VRPC SERIES

These lightweight plastic connectors deliver a flexible contact system with excellent sealing, polarization and cable support while meeting EN and NFF standards for fire and smoke resistance.



### HTB SERIES:

The ability to withstand temperatures of 800° C for 30 minutes ensures these connectors can maintain critical control signals and allow trains to move away from a fire.



### VBN SERIES:

With flame-retardant inserts these connectors meet the NFF 61030 specification and provide a very quick and efficient field installation system.



### POWER PLATE SERIES:

The compact design of this multi-pole power interconnection system enables connection of the railcar to bogie with the minimum use of space.



### CIR FIBER OPTIC SERIES

A series that combines high speed data transmission capability with the proven heavy duty performance and staying power of FRCIR.



### TRIDENT SERIES

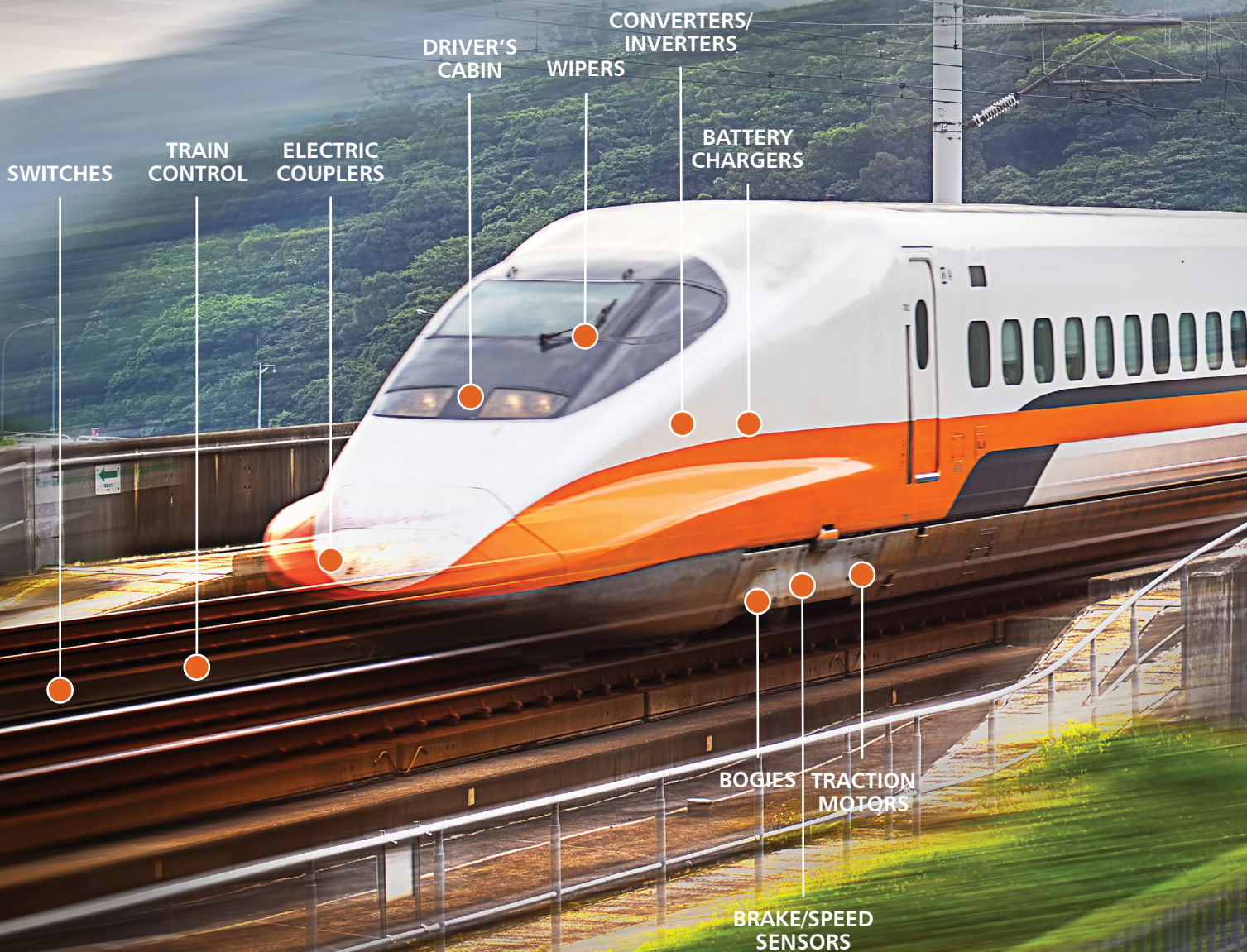
These ultra-versatile harsh environment connectors offer interchangeable contacts and rectangular, circular and rack-and-panel configurations.



### DSR

The double start, ratcheted coupling system of this high-shock and vibration resistant series prevents unmating in critical intervehicle and coupler applications.

# We connect passengers to their next adventure.



The teams at ITT Veam and ITT Cannon have an extensive, in-depth knowledge of rail from the tracks to the engine to the passenger car and every connection, every wire, every socket that makes for a smooth and efficient ride. As we continue to develop leading-edge technology, we'll continue to bring you the reliability and durability required to push the limits of rail.



	FRCIR	FRCIR-WCMIL	FRCIR290	FRMG CIR	VA900	VIP	FRCIR M12	CIR FIBER OPTIC	VRSL	CA BAYONET	VBN	POWER PLATES	TRIDENT	VRPC	HTB	JUNCTION BOXES	DSR	JUMPER CABLES
SWITCHES	●																	
TRAIN CONTROL	●									●								
ELECTRIC COUPLERS	●						●										●	●
DRIVER'S CABIN													●	●				
WIPERS													●					
CONVERTERS/INVERTERS	●		●	●	●	●	●				●	●			●			
BATTERY CHARGERS	●		●	●	●	●					●	●						
BOGIES	●	●	●	●	●							●						
BRAKE/SPEED SENSORS	●	●		●														
TRACTION MOTORS			●	●	●							●				●		
POWER DISTRIBUTION	●		●	●	●						●	●			●	●		
AUTOMATIC DOORS	●										●		●	●				
INTERVEHICLE	●		●	●			●	●	●						●		●	●
SEATS													●	●				
TOILETS														●				
HVAC	●										●							
PANTOGRAPHS/HV					●													
SIGNALING	●																	

# Connecting you with our expertise for powerful innovations.

As the need for connector technology in everything from high power distribution to sensors grows, we ensure our connectors are developed in alignment with the highly demanding needs of your market by actively participating in standardization bodies and working closely with industry technicians.

It is this type of collaboration that has led us to exceed industry standards and develop ceramic heat-resistive inserts, ROHS compliant corrosion-resistant conductive platings, plus:

- **Flame-retardant insulator materials**
- **Mix of power, signal and data lines within a single robust connector**
- **Rigid insert, field configurable circular connectors according to NFF 61030**
- **High temperature connectors that meet European SRT TSI fire rail safety regulations**
- **Shielded solutions for data transmission bundling Ethernet, WTB, MVB and video lines in one connector**

When it comes to creating the most advanced technology to improve mass transit systems performance, ITT Veam is ready to work with you.

Industry-recognized safety and reliability.



## ITT VEAM CONNECTS

Linking the commercial hubs of central and southern China, ITT Veam helps this high speed line keep the passengers moving.



## ITT VEAM CONNECTS

Serving 25 million passengers a year, ITT Veam provides this European regional rail system with the reliability and durability they need.



# Connecting to the future.

As a leader of innovation in the rail industry, we continue to blaze trails with the newest technology. By working with you to develop solutions for your toughest rail challenges and most complex requirements, we're heading into the future with a keen focus on:

**WEIGHT REDUCTION • HIGH DENSITY / SIZE REDUCTION • INCREASED EASE OF ASSEMBLY AND MAINTENANCE • COMPATIBILITY WITH ALUMINUM CONDUCTORS • SAFETY DISCONNECTION SYSTEM • SAFETY LOCKING SYSTEM • HIGH-SPEED DATA TRANSMISSION EVOLUTIONS • WIRELESS POWER**

As part of the ITT Connector family, ITT Veam and ITT Cannon share in their commitment to innovation and to delivering enduring solutions to customers. With employees in over 35 countries and sales spanning 125 countries, ITT is the go-to partner for the key industries that underpin our modern way of life—providing the technology and engineering they rely on.

Connect with your ITT Veam  
representative today or visit us at

[www.ittcannon.com](http://www.ittcannon.com)

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**Let's connect passengers to peace of mind.**

Contact ITT Veam today to start working toward unique  
solutions for your unique challenges.



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