



RFID SOLUTIONS THAT KEEP YOU ON TRACK

- Balise System
- Yard Management System
- AEI – Automatic Equipment Identification



<http://>

WWW.INTERTECHRAIL.COM

Intertech® Rail®

20 YEARS OF FORGING SAFER AND RELIABLE RAILWAYS

Since 2004, Intertech Rail has been dedicated to providing secure and dependable rail solutions.

Headquartered in Coral Gables, Florida, we serve a wide range of international clients.

Our main product lines include:



Railway Software & Management Systems

- Yard Management Systems
- Rail-Intermodal RFID Solution
- Balise System



Safety & Control Components

- Fail-safe Relays
- Switch Machines

CLIENT PORTFOLIO



TRUSTED TRACKS AHEAD

MEET THE MODEL 2

RFID Programmer



Rugged tablet with TransCore®
RFID technology;

Supports 915MHz and
870MHz RFID tags;

Durable for extreme
temperatures, dust,
and moisture;

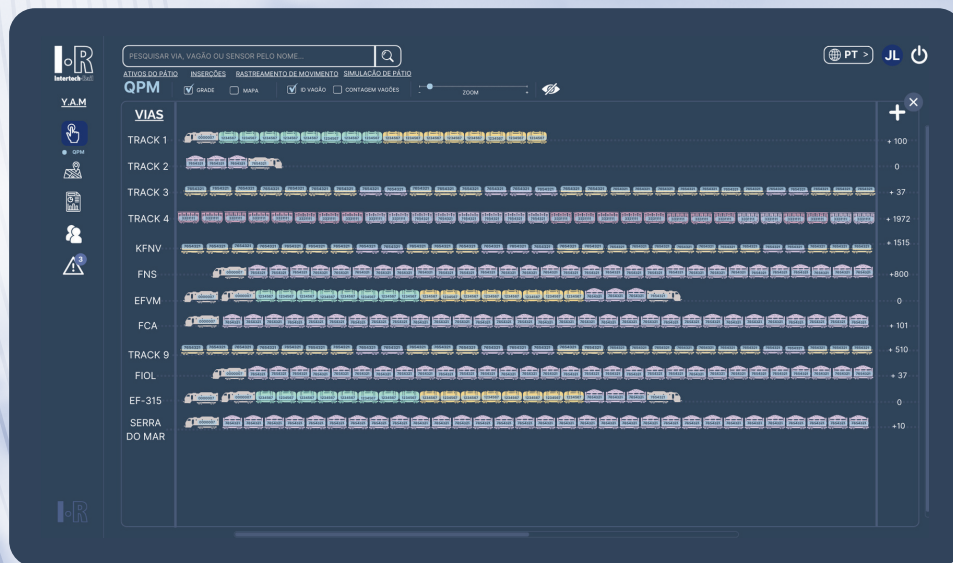
Connectivity: WiFi,
Bluetooth®, USB, RS232;

Includes barcode scanner, front
and rear cameras, and GPS;



Intertech•Rail- AEI - TRACKING SYSTEM

AEI (Automatic Equipment Identification) system uses RFID tags and a specialized portal to track and identify rail equipment, including railcars and locomotives. It provides precise train formation and asset control.



Rail-ID® Yard Manager & Dispatcher System

- Fully integrated with our readers
- Cloud Server, accessible anywhere in the world
- Available on cloud and on-premises installations



Rail-ID® Software

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CLOUD SERVER:

- Service for reading and processing Automatic Equipment Identification
- API and database connection to any customer system
- Dashboard for data control and visualization

CARGO RECOGNITION & CAMERA :

- Load reading and identification via camera
- Automated load verification aligned with scales
- Wagon reading with camera for asset control

TRAIN CONSIST:

- Asset management for locomotives and wagons
- Control of train compositions using RFID tags



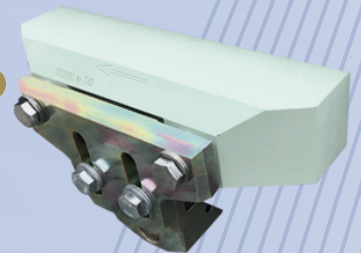
Xtreme Multiprotocol Reader

- Rugged RFID reader with IP65/67 rating
- Manages up to four antennas
- Wide power range (12 a 110 VDC)
- Programmable RF attenuation and frequency
- Complies with AREMA



Yard Reader

- Integrated RFID all-in-one, easy installation and maintenance
- Integrated RFID reader for yard management and mainline asset control.
- Supporting multiple protocols (SeGo, eGo, ATA/AAR, IAG) with built-in translator.
- Programmable RF settings
- Water-resistant enclosure, available with internal and external antennas
- Fully integrated to Rail-ID Cloud Server and modules



Wheel Sensor

- Detects wheel presence counts axles, and measures movement
- Real-time data transmission via RS-485.
- Integrates with TransCore Readers
- Easy installation with claws
- Supports speeds up to 360 km/h, and operates in temperatures from -60°C to +70°C



Harsh Environment Tag

- Beam-powered RFID tag for harsh environments
- 915 MHz and 870 MHz frequency, weatherproof shell
- 1088-bit capacity, no battery needed
- Mutual authentication for data security
- Compatible with Amtech® and TransCore® readers



High-Temperature Tag

- High-temperature resistant RFID tag
- Operates up to 350°F (177°C)
- Beam-powered, no internal battery
- Data security with factory-locked and user-programmable fields
- Weather-resistant construction

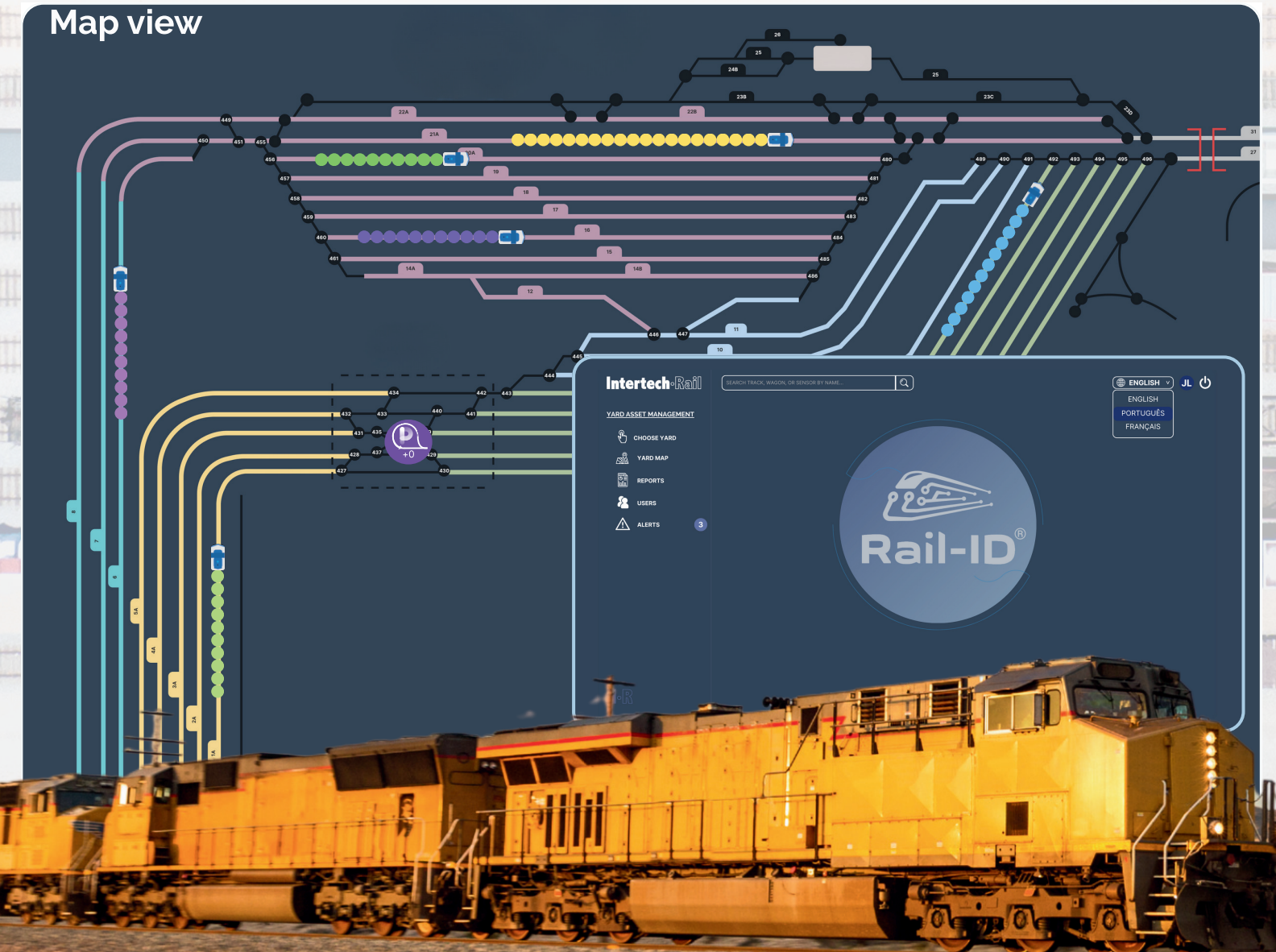


Gain real-time visibility and control over your rail yard.

Track every car, streamline operations, and reduce delays:
for safer, faster, and more efficient performance

- Real-time train positioning
- Railcar Component Tracking
- Handles complex, high-volume traffic
- AI integration for maneuver suggestions
- Centralized control interface
- Scalable to any yard size
- Smooth, reliable performance
- Streamlined workflow, higher productivity
- Reduced delays through better visibility
- Safer, more organized yards

Map view





Customizable reports (KPIs)
Generate reports tailored to your operational goals, with key performance indicators

Seamless integration
Easily connects with AEI systems and existing infrastructure.

The screenshot displays the IOR system interface. At the top, there is a search bar labeled 'PESQUISAR VIA, VAGÃO OU SENSOR PELO NOME...'. Below it, there are tabs for 'ATIVOS DO PÁTIO', 'INSERÇÕES', 'RASTREAMENTO DE MOVIMENTO', and 'SIMULAÇÃO DE PÁTIO'. The 'RASTREAMENTO DE MOVIMENTO' tab is selected. On the left, there is a sidebar with icons for 'Y.A.M.', 'QPM', and a warning icon. The main area shows a table titled 'All Wagons (30)'. The table has columns for 'Image', 'Train ID', 'Car Number', 'Bearing Type', 'Length', 'Number of Axis', 'Platform Code', 'Side Indicator', and 'Tag ID'. The table lists 30 wagons with their respective details. On the right side of the table, there is a vertical scale with values ranging from +100 to +10.

Image	Train ID	Car Number	Bearing Type	Length	Number of Axis	Platform Code	Side Indicator	Tag ID
	352	XY 30	3	511	11	13	1	9DCBE580007BFF44BD000000000003
	351	XY 29	3	511	11	13	1	9DCBE5800077FF44BD000000000003
	350	XY 28	3	511	11	13	1	9DCBE5800073FF44BD000000000003
	349	XY 27	3	511	11	13	1	9DCBE580006FF44BD0000000000003
	348	XY 26	3	511	11	13	1	9DCBE580006FF44BD0000000000003
	343	XY 25	3	511	11	13	1	9DCBE5800063FF44BD000000000003
	342	XY 24	3	511	11	13	1	9DCBE5800063FF44BD000000000003
	341	XY 23	3	511	11	13	1	9DCBE580005FF44BD0000000000003
	340	XY 22	3	511	11	13	1	9DCBE5800058FF44BD0000000000003
	339	XY 21	3	511	11	13	1	9DCBE5800057FF44BD000000000003

Detailed Car Positioning & Railcar Information
View precise wagon locations and access comprehensive, real-time data.

Enhanced Yard Safety
Avoid traffic congestion and operational hazards using system insights.

Track View

The screenshot displays the IOR system interface in 'Track View'. At the top, there is a search bar labeled 'PESQUISAR VIA, VAGÃO OU SENSOR PELO NOME...'. Below it, there are tabs for 'ATIVOS DO PÁTIO', 'INSERÇÕES', 'RASTREAMENTO DE MOVIMENTO', and 'SIMULAÇÃO DE PÁTIO'. The 'RASTREAMENTO DE MOVIMENTO' tab is selected. On the left, there is a sidebar with icons for 'Y.A.M.', 'QPM', and a warning icon. The main area shows a list of tracks and the wagons currently on each track. The tracks are labeled 'TRACK 1', 'TRACK 2', 'TRACK 3', 'TRACK 4', 'KFNV', 'FNS', 'EFVM', 'FCA', 'TRACK 9', 'FIOL', 'EF-315', and 'SERRA DO MAR'. Each track has a corresponding row of wagon icons. On the right side of the table, there is a vertical scale with values ranging from +100 to +10.

Track	Wagon Details
TRACK 1	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
TRACK 2	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
TRACK 3	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
TRACK 4	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
KFNV	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
FNS	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
EFVM	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
FCA	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
TRACK 9	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
FIOL	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
EF-315	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30
SERRA DO MAR	Wagon 1, Wagon 2, Wagon 3, Wagon 4, Wagon 5, Wagon 6, Wagon 7, Wagon 8, Wagon 9, Wagon 10, Wagon 11, Wagon 12, Wagon 13, Wagon 14, Wagon 15, Wagon 16, Wagon 17, Wagon 18, Wagon 19, Wagon 20, Wagon 21, Wagon 22, Wagon 23, Wagon 24, Wagon 25, Wagon 26, Wagon 27, Wagon 28, Wagon 29, Wagon 30





Discover Rail-ID®'s suite of cutting-edge railway solutions to enhance operational efficiency and reliability. Our technology ensures seamless identification, tracking, and management for the global rail industry, meeting the highest standards of performance.



Rail-ID® Server

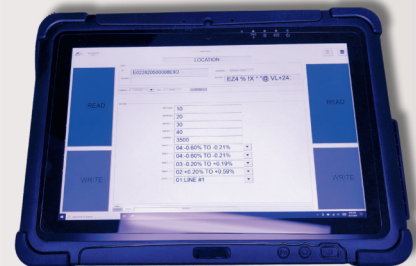


A versatile solution is available in both cloud and on-premises formats. Manages RFID reading points and wayside equipment to ensure high-performance operations and reliable data.

Rail-ID® Model 2



A state-of-the-art hand-held reader and programmer that allows users to manage railcar RFID data directly in the field.



Rail-ID® Eyes

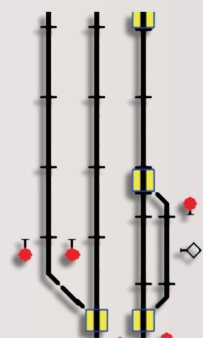


Video recognition system that enables the identification of cargo inside railcars using the Rail-ID Eye module, integrated with the local Rail-ID Xpress.

Rail-ID® Dispatcher



On-premises railway dispatcher that integrates with various interlocking systems to enhance and streamline dispatch operations.





Rail-ID® Edge



The remote terminal unit Edge is responsible for integrating readers and equipment directly into the field. Supports GSM, WiFi, Fiber, and Ethernet for flexible and robust communication.

Rail-ID® Xpress



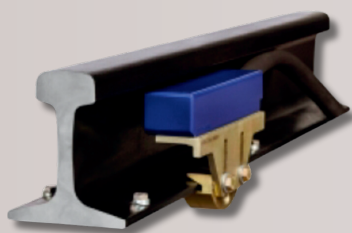
A minimalist local Rail-ID Server that integrates with readers, wayside equipment, and/or the Rail-ID Eye camera system directly in the field. Ideal for stand-alone applications where a full server is not required or where a camera is installed.



Rail-ID® Yard



Rail yard and asset management system that oversees all assets within a rail yard, including railcar identification and location tracking.



Rail-ID® Digital Wheel Sensor



Digital wheel sensor that provides precise wheel identification and enables the Rail-ID Server to calculate train consists with high accuracy.

Readers



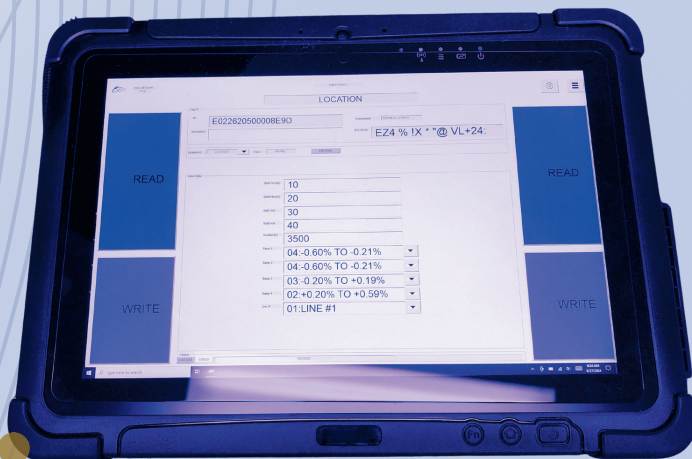
AAR-approved RFID readers and antennas, powered by Rail-ID, ensure reliable and efficient operation.



Powered by TransCore®

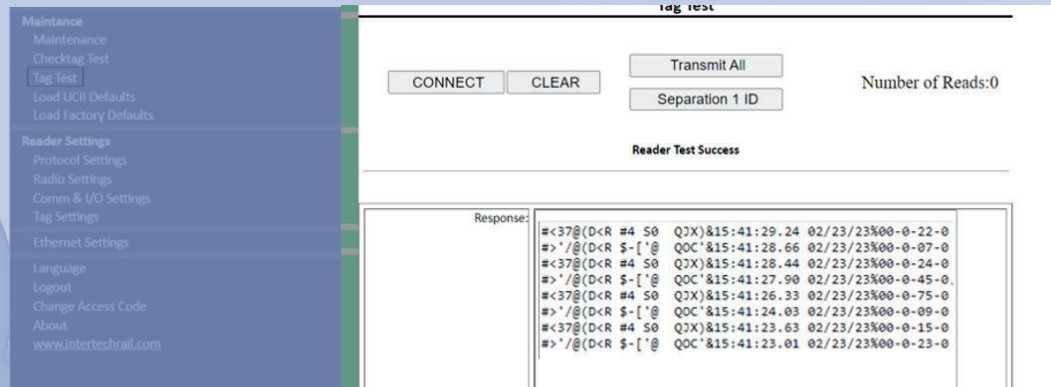
Intertech® Rail - BALISE SYSTEM

Integrates ATC systems with RFID Balises and locomotive readers, relaying critical information such as speed limits and track conditions. This enables automatic speed control and emergency braking, enhancing safety, optimizing train headway, and boosting productivity. The system is extensively compatible with various ATC/ATO systems.



Model 2 - RFID Programmer

- Rugged tablet with TransCore RFID technology
- Supports 915MHz and 870MHz RFID variants
- Durable for extreme temperatures, dust, and moisture
- Connectivity: WiFi, Bluetooth®, USB, RS232
- Includes barcode scanner, front and rear cameras, and GPS



Rail ID WCS

- Tag programming and reading
- Functional testing of tags
- Remote update of MPRX firmware
- Functional testing of MPRX

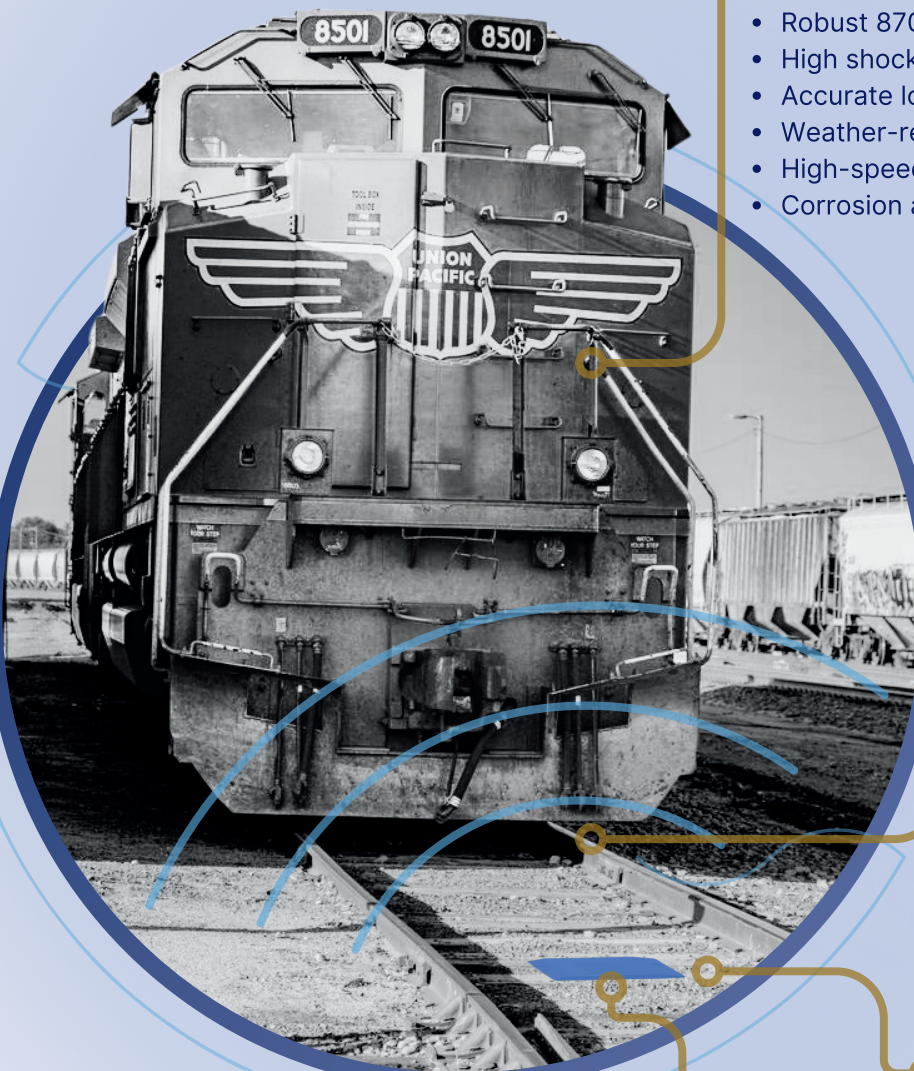
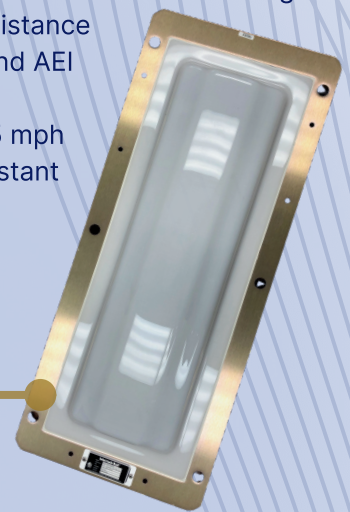
Multiprotocol Reader

- Rugged RFID reader with IP65/67 rating
- Wide power range (24-110V DC and 12-24V DC)
- Programmable RF attenuation and frequency
- Complies with AREMA
- Protocols: ATA/AAR, SeGO, eGO



Heavy Rail Antenna

- Robust 870/ 915 MHz antenna for train undercarriages
- High shock and vibration resistance
- Accurate location tracking and AEI
- Weather-resistant radome
- High-speed reading up to 75 mph
- Corrosion and chemical-resistant



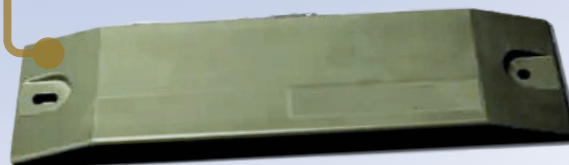
Harsh Environment Balise

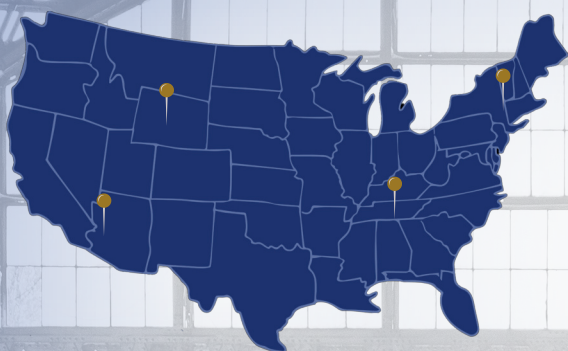
- Beam-powered RFID tag for harsh environments
- 915 MHz frequency, weatherproof shell
- 1088-bit capacity, no battery needed
- Mutual authentication for data security
- Compatible with Amtech® and TransCore® readers



Signal Tag

- Externally-powered RFID tag for rail traffic monitoring
- Connects to rail signal light systems
- Operates on AC or DC power
- Weather-resistant includes 37-inch two-wire interface cable





HEADQUARTERS - U.S.A

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All our products are
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