pivot
Powered by ::: BlackBerry.

PIVOT Gateway
H2M IS

Pivot is an advanced railcar remote monitoring solution that utilizes the Gateway H2M IS and sensors to deliver crucial insights into railcar operations.

The H2M IS offers precise location tracking and impact detection for railcars. Serving as the central hub, it also collects data from strategically positioned sensors on the railcar. The sensors monitor various conditions and statuses, transmitting data to the gateway H2M IS, which then relays it to a centralized monitoring system. This ensures insights into railcar operations, enhancing safety and efficiency throughout value chain.

The Pivot Gateway H2M IS is certified to be intrinsically safe in hazardous conditions and is built to withstand rugged rail conditions. It is energy independent with no reliance on external sources of energy and can be installed quickly anywhere on a railcar.

FEATURES

Long lasting battery	Quick installation	Encrypted and secure	Long-Range sensor connectivity
Suitable for all railcars	C1D1 certified	User friendly interface	Supports multiple sensors

BENEFITS

Improved Asset Utilization	Reduced Dwell and Cycle Times	Reduced Downtime and Maintenance Costs
Streamlined Supply Chain Coordination	Enhanced Security and Cargo Protection	Data-Driven Decision Making

READING & REPORTING

- ✓ RAILCAR LOCATION
- ✓ IMPACT
- ✓ DOOR OPEN / CLOSED
- ✓ HATCH OPEN / CLOSED
- ✓ LOADED AND UNLOADED
- ✓ HAND BRAKE ON / OFF

pivot@ztr.com | 1-519-452-1233 | www.ztr.com/pivot

ZTR

PIVOT Gateway
H2M IS

Specifications

The PIVOT Gateway communicates with compatible external wireless sensors and enables expansion of features and services.

Physical

Dimensions
314mm x 97mm x 43.5mm
(12.3" x3.8" x 1.7")

Weight
1.069kg (2.36lb)

GNSS

GPS/GLONASS
- Location
- Mileage Reporting
- Route Tracking

Sensors

3-Axis Accelerometer & Gyroscope
- Start Stop Alerts
- Tamper Alerts
- Impact Detection

Configurable Duration and Amplitude with Shock Curve

Battery

Built-In Long-Lasting Lithium Thionyl Chloride Battery
273 Wh capacity (38 Ah @ 7.2V)
5+ years battery life*

Processor & Memory

32-bit CPU with low current drain
LPDDR + Flash
Enough memory for full data storage until transmission.

Battery life estimates are based on real world modeling for typical railcar usage. Actual battery life may differ.

Communication

LTE CAT-M1 modem
5G/5G IOT Network Enabled
North America, Europe, APAC
RF bands supported:
LTE FDD: 1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26, 27, 28, 66, 85

Sensor Gateway

SubGHz short range connectivity to compatible wireless sensors
915MHz, 869.85MHz and 2.4 GHz with a proprietary protocol
Reliable, long-range communication delivering superior performance in difficult environments.

Environmental

Operating Temperature Range:
-40°C to 85°C (-40°F to 185°F)

IECEX/ATEX/cETLus Ambient Temperature Range: -40°C to 70°C (-40°F to 158°F)

Operational Altitude - 500 to 15,000 feet

Software, Updates & Security

BlackBerry QNX RTOS
BlackBerry QNX Wireless Framework 1.0
BlackBerry Secure IoT Platform Client: Over-the-Air (OTA) Software Updates

Certifications

Environment:
MIL STD-810G
SAE J1455
IP67, IP69K, IEC 60529
EN 60950-1:2006
RoHs, REACH, WEEE

Radio & EMC Certification:
PTCRB, GCF, CE, FCC, IC

Product Safety:
UKCA, NOM, CA prop 65

ATEX & IECx:
IEC 60079-0, IEC 60079-11
Ex ia IIC T4 Ga
Ex ia IIIC T135°C Da
Ex II 1GD

HazLoc:
ANSI/UL 60079-0, 60079-11, UL 913, ANSI/ISA−12.12.01−2000 Class I, Zone 0, AEx ia IIC T4 Ga Class II, Zone 20, AEx ia IIIC T135°C Da Class I, Division 1, Groups A, B, C, D; T4 Class I, Division 2, Groups A, B, C, D; T4 Class II, Division 1, Groups E, F, G; T4 CAN/CSA C22.2 No. 60079-0, CAN/CSA C22.2 No. 60079-11 Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da

Quality: ISO 9001

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