MPRX

Multiprotocol Reader

TransCore's MPRX Multiprotocol Reader is a radio frequency identification (RFID) reader that is specifically designed for harsh environment applications.

The MPRX comes in an IP65/67 rated case for dust and water ingress protection in harsh outdoor or rail environments. The MPRX boasts Ethernet (via sealed M12 connector), RS422, and RS232 communication protocols. All interfaces support simultaneous host communications in real-time for passing read data to the host computer.

The MPRX employs advanced multiplexing techniques that improve reader performance at higher vechicle speeds when compared to legacy products, allowing one reader to manage up to four antennas. In addition, the reader can supply active antenna information to the host, tying tag reads to each multiplexed antenna.

Features

- IP65/67 dust and water ingress protection
- Meets AREMA C&S Manual Standards for Classes C, D, E, H, I, & J
- Multiple communication schemes allow simultaneous monitoring over Ethernet, RS422, and RS232
- Wide-input DC power (24-110V) or low-voltage DC power (12-24V) for on-board and rail automatic equipment identification (AEI) applications
- Programmable RF attenuation and frequency
- Multiplexes up to four antennas

Applications

- Rail AEI
- On-board train environment
- Access control

TRANSCORE®
Trusted Transportation Solutions

MPRX Multiprotocol Reader

COMMUNICATION

Available Frequency Ranges
902-928MHz, Fixed Frequency

Protocols
American Trucking Associations (ATA) ISO 10374
Super eGo (SeGo)
eGo (ISO 18000 6B)
Interagency Group (IAG)

HARDWARE FEATURES

RF Connector
N-type Socket (single/4 port)

Host Port
12 Pin M23 Circular Connector with:
- 1 – RS232 Interface
- 1 – RS422 Interface
- Tag Lock Relay

Sense Port
12 Pin M23 Circular Connector with:
- 2 - Sense Inputs (0/5V)
- 2 - Outputs (0/5V)
- 2 - Checktag/Weigand Outputs
- 1 - Mux Antenna Select Output

Ethernet Port
4 Pin M12 Circular Connector with:
- 10/100 Industrial Ethernet

POWER REQUIREMENTS

Input Voltage
Wide-Input Option: 24VDC-110VDC 30W (12-150VDC Min/Max)

Low-Voltage Option: 12VDC-24VDC 30W (9-36VDC Min/Max)

PHYSICAL

Dimensions
Size: 13 x 5 x 2.49 in (33 x 7.62 x 6.32 cm)
Weight: 5.7 lb (2.6 kg)

COMPLIANCE

RF Interference
Units have been tested and are verified to Part 15 of the FCC rules for a Class A digital device.

Safety
Complies with the requirements of Underwriters Laboratories UL–60950-1, Standard for Safety of Information Technology Equipment

REGULATORY

Standards
Designed to meet the following standards:
AREMA C&S Part 11.5.1 Class C
AREMA C&S Part 11.5.1 Class D
AREMA C&S Part 11.5.1 Class E
AREMA C&S Part 11.5.1 Class H
AREMA C&S Part 11.5.1 Class I
AREMA C&S Part 11.5.1 Class J
EN 50125-3:2003
EN 50121-3-2
EN 50155
EN 55022:2006 +A1:2007
EN 61000-4-3:2006 +A1:2008
EN 61000-4-4:2004
EN 61000-4-6:2007
EN 61000-4-8:1994 +A1:2001
EN 61000-4-9
EN 61000-6-4
EN 61373:2011
UL 60950-1

LICENSING

Equipment License
FCC: The user is required to obtain a Part 90 site license from the FCC to operate in the United States. Access the FCC website at http://wireless.fcc.gov/uls for more information.

FCC ID: FIHMPRX

ENVIRONMENTAL

Operating Air Temperature
-40°F to +158°F (-40°C to +70°C)

Storage Temperature
-67°F to +185°F (-55°C to +85°C)

Ingress Protection
Certified to IP65/67
Dust-proof/Waterproof Enclosure

Vibration Tolerance
Complies with AREMA C&S Manual, Part 11.5.1, Class I & J
Complies with EN61373

Shock Tolerance
Complies with AREMA C&S Manual, Part 11.5.1 Class I & J
Complies with EN61373

ACCESSORIES

MPRR Check Tag Accessory Kit: 20-7001-001

Host Cable: 58-7200-NNN (Contact Sales for lengths)

Sense Cable: 58-7201-NNN (Contact Sales for lengths)

For more information:

Sales Support
800.923.4824

Technical Support
505.856.8007

transcore.com

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