XR450 RFID Fixed Reader

FEATURES

**Robust platform
for industrial-class
EPC Gen 2 RFID
implementations**
Delivers high-performance
RFID data capture and
communication in dense
reader environments

**Support for 4 Mono-static /
4 Bi-static ports on XR-450**
Facilitates decreased
deployment complexity and
increased flexibility of RFID
implementations

**Microsoft Windows® CE 5.0
direct application hosting,
Intel XScale® processor
with 64 MB RAM/
64 MB Flash**
Enables easy integration
of wide range of third-party
applications to maximize
business operational
efficiency; enables upgrading
to meet future requirements;
maximizes product lifespan;
provides outstanding
investment protection

**Support for U.S. and
other countries**
Flexibility to support
global deployments

Industrial-class RFID reader delivers maximum functionality and benefits

The XR Series Readers from Motorola offer maximum functionality for large-scale RFID deployments. This strategic platform is designed to help enterprises achieve competitive advantage by increasing inventory visibility and process efficiency, resulting in reduced costs and improved profitability. Reliable and efficient tag reading in dense RF environments eliminates interference issues associated with multiple RFID readers in close proximity. The standards-based service-oriented architecture enables seamless integration and interoperability with your existing IT infrastructure — and maximum application flexibility. Robust RFID functionality includes support for standard back-end platforms, direct application hosting, and the ability to interact with additional asset automation equipment such as forklifts and conveyor belts. Support for leading business systems includes IBM's Data Capture and Delivery Solution (DCDS) certified to work with IBM Premises Server 6.1 and 6.0, Microsoft RFID Biz Talk Server 2006 R2 and SAP as well as leading development tools including .NET 2.0 and off-the-shelf applications. The flexible product line can support deployments around the world: the XR450 four port device operates in 902-928 MHz US frequency band and supports other regions, such as China and South Korea.

Next generation performance and manageability

The easy-to-deploy devices provide a rich feature set to support the RFID applications of today and tomorrow. The XR450 offers customers the ability to select between using four mono-static ports that require only one antenna or four bi-static ports that require dual antennas for transmit and receive, providing greater flexibility to adapt the reader to the intended application and perform at the highest possible performance in the most challenging RF environments. Superior read rates and enhanced read ranges easily accommodate multiple RFID applications — from dock doors and conveyor belts to the warehouse floor or store front. Advanced data collection features enable the rapid delivery of refined real-time information. The ability to incorporate alarms, light sensors and more from other automated asset equipment enables a wide range of business processes — from dynamic reconfiguration of build-to-order assembly lines to real-time alerts that can prevent the placement of inventory in the wrong location. And the ability to control and maintain all XR Series Readers from a single central location dramatically simplifies and reduces the costs associated with day-to-day management.

Expand functionality and benefits with direct application hosting

The ability to embed a wide array of software applications, such as IBM's DCDS, enables the creation of an "intelligent" RFID reader capable of automating and managing the incoming RFID data. The result is the real-time visibility needed across the supply chain to improve productivity, optimize inventory management — and reduce inventory levels and associated costs.

End-to-end lifecycle support

Motorola offers true end-to-end solutions, including the services you need to successfully incorporate RFID technology into your environment — from assistance with planning through implementation to ongoing support.

For more information about the XR450 RFID Reader, please visit us on the Web at motorola.com/rfid

Open standards-based architecture
Enables seamless integration with existing IT environment

Enterprise connectivity through control I/O ports
Expand RFID solutions to include intelligent initialization, direction and control of conveyor belts, portals and more

Durable construction
Maximizes uptime and reduces maintenance and repair costs

Advanced data collection features
Filtering, reconciliation, user-defined association, selective visibility and more enable the delivery of refined real-time information, enabling the rapid collection and delivery of meaningful data

Security Features
Secure data transmission over external network interfaces with secure FTP transfers of files to and from the reader

XR450 Specifications

Physical Characteristics	XR450
Dimensions:	22cm L x 30cm W x 5cm H (8.75 in. L x 11.75 in. W x 2.0 in. H)
Weight:	2.27kg/5 lbs
Base Material:	Die-cast aluminum
Visual Status Indicators:	LEDs for power (green), activity (yellow) and error (red)
Connectivity	
Network:	10/100 BaseT Ethernet – RJ45
External interfaces:	Control I/O (12) – DB15; RS232 Serial Console - DB9 USB Host – Type A; USB Client – USB Type B
RF Connectors:	8 Reverse TNC
Read Points:	4 mono-static ports (default operation); or 4 bi-static ports (4 transmit ports, 4 receive ports)
Power Supply:	+24v DC @ 1.2 amps
Environmental	
Temperature:	IEC 60068-2-1/2/14
Operational:	-20° to +55° C/-4° to +141° F
Storage:	-40° to +70° C/-40° to +158° F @85% RH
Humidity:	IEC 60068-30/56 5-95% non-condensing
Vibration:	IEC 60068-2-6
Environmental Sealing:	IP53
Compliance	
Safety:	EMI/RF Emissions, UL60950-01
Regulatory:	Region 1, FCC Part 15 US
Hardware/OS & F/W Management	
Memory:	Flash 64 MB; DRAM 64 MB
Operating system:	Win CE (Version 5.0)
Firmware upgrade:	Web-based and remote firmware upgrade capabilities
Management Protocols:	SNMP support and AirBEAM level 2 support
Tag Protocol:	EPC Gen 2 (Dense Reader Mode)
Frequency:	UHF band, 902-928 MHz US
Method:	Frequency Hopping Spread Spectrum
Power Output:	Up to 30 dBm
Air Link Protocol:	EPC Gen 2 (Dense Reader Mode)
Synchronization:	Network Time Protocol
IP addressing:	Static and dynamic
Host Interface Protocols:	XML and Byte Stream
Warranty	The XR450 is warranted against defects in workmanship and materials for a period of one year (12 months) from date of shipment, provided the product remains unmodified and is operated under normal and proper conditions.
Recommended Services	
Customer Services:	Service from the Start Advance Exchange Support
Advanced Services:	Advanced Services for RFID

NOTICE: Repairs of this product may require the use of Motorola proprietary parts (and/or Motorola proprietary information). Motorola will sell these parts (and provide this proprietary information) only to end-user customers for self-service. Applicable in the U.S. For all other countries, please contact your Motorola account manager or the local Motorola Customer Service representative in your area for further details.

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