



# ZEBRA FX9500 FIXED RFID READER

## HIGH PERFORMANCE RFID DATA CAPTURE FOR INDUSTRIAL ENVIRONMENTS

### GET TOP OF THE LINE PERFORMANCE – NOW AND IN THE FUTURE

Your business relies on tracking your valuable assets and moving your sellable products. The faster you can receive, inventory, pick and ship – without errors and without bottlenecks – the more efficient and profitable your operation can be.

The FX9500 Fixed RFID Reader is designed to be as hardworking and efficient as you are. With exceptionally high RF sensitivity, the FX9500 delivers extremely high read performance, so you can quickly and accurately move and track large volumes of your RFID-tagged cases, pallets and items. Greater accuracy means more efficient operations in RF-challenging environments and with RF-challenging materials, such as those with a high metal or liquid content.

The higher sensitivity also means longer read ranges for large distribution center and yard management applications, and higher throughput rates for high volume reading and densely packed goods situations.

The FX9500 is also rugged. Featuring an IP53 sealing rating and an extremely durable design, the FX9500 is built to perform in the widely variable temperatures of a loading dock or in a large, dusty distribution center.

### REAP BOTTOM LINE ADVANTAGES

With its best-in-class processor and expanded memory, the FX9500 comes in a 4-port model, as well as an 8-port model; the latter lets you cover more dock door portals or read points with fewer readers so you save on deployment costs and achieve a lower cost per read point. Each configuration is also able to perform in either monostatic or bistatic mode (where one or two cables are used respectively for transmit and receive signals), giving you complete control to optimize your application. That means increased efficiency and accuracy every time your inventory is touched, from receiving to pick/pack/ship. You save labor costs, reduce carrying expenses and deliver the right product on time every time.

High traffic volumes, a wide variety of tagged products, item-level tagging, seasonal product shifts – the speed and sensitivity of the FX9500 can handle it all.

### A LINE YOU CAN TRUST

The FX9500 joins the broadest, most comprehensive portfolio of business and industrial fixed, mobile, handheld and hands-free RFID readers available today. Zebra has deployed more UHF RFID readers than any other RFID provider, so you get the peace of mind that comes from choosing products that are well-tested in practically every industry. We're ready to use our experience to help you get more value out of your RFID data and enjoy a faster return on your RFID solution.

For more information on the FX9500 RFID reader, please visit us on the web at [www.zebra.com/fx9500](http://www.zebra.com/fx9500) or access our global directory at [www.zebra.com/contact](http://www.zebra.com/contact).

### FEATURES/BENEFITS High-performance RFID reader

Ideal for high volume, high density, high throughput applications; can accommodate growing needs to future-proof your investment

### Rugged design

IP53 sealing, diecast housing; maximize uptime even in the toughest warehouse or production environments

### Application flexibility and lower deployment costs

4-port and 8-port reader configurations; provides greater application flexibility and lets you cover more portals with fewer readers

### Small footprint

All cabling and input/output ports are on one side, resulting in a compact size that simplifies and reduces the cost of set-up deployment and management



# FX9500 SPECIFICATIONS

## PHYSICAL CHARACTERISTICS

|                          |  |
|--------------------------|--|
| Dimensions               | 10.75 in. L x 7.25 in. W x 2.0 in. D<br>(27.3 cm L x 18.4 cm W x 5 cm D) |
| Weight                   | 4.4 lbs ± 0.1 lbs (2.13 kg ± 0.05 kg )                                   |
| Housing Material         | Die-cast Aluminum, meets IP53 standards                                  |
| Visual Status Indicators | Multicolor LEDs: Power, Activity, Status and Applications                |

## RFID

|                         |  |
|-------------------------|--|
| Max Receive Sensitivity | 84.5 dBm monostatic;<br>105 dBm bistatic         |
| Air Protocols           | ISO 18000-6C (EPC Class 1 Gen 2)<br>ISO 18000-6B |
| Frequency (UHF Band)    | 902 MHz~928 Mhz, 865 Hz~868 MHz, and sub-bands   |
| Power Output            | +10dBm to +33dBm                                 |

## CONNECTIVITY

|                     |  |
|---------------------|--|
| Communications      | 10/100 BaseT Ethernet (RJ45);<br>USB Host & Client (Type A & B);<br>Serial (DB9)   |
| General Purpose I/O | 4 inputs, 4 outputs, optically isolated (Terminal Block)   |
| Power Supply        | +24Vdc   |
| Antenna Ports       | FX9500-4: 4 monostatic or 2 bistatic ports (Reverse Polarity TNC)<br>FX9500-8: 8 monostatic or 4 bistatic ports (Reverse Polarity TNC) |

## ENVIRONMENTAL

|                 |                                |
|-----------------|--------------------------------|
| Operating Temp. | -4° to +131° F/-20° to +55° C  |
| Storage Temp.   | -40° to +158° F/-40° to +70° C |
| Humidity        | 5-95% non-condensing           |
| Sealing         | IP53                           |

## HARDWARE, OS AND FIRMWARE MANAGEMENT

|                         |  |
|-------------------------|--|
| Memory                  | Flash 128 MB; DRAM 128 MB  |
| Operating System        | Linux  |
| Firmware Upgrade        | Web-based and remote firmware upgrade capabilities                   |
| Management Protocols    | RM 1.0.1 (with XML over HTTP/HTTPS and SNMP binding)                 |
| Network Services        | DHCP, HTTP, FTPS, SSH, HTTP, FTP, Telnet, SNMP and NTP, WS Discovery |
| IP addressing           | Static and Dynamic   |
| Host Interface Protocol | LLRP + RM  |
| API Support             | .NET and C   |

## GEOGRAPHIC AVAILABILITY

Supported regions based on US and European (ETSI EN 302-208) RFID frequencies

## RECOMMENDED SERVICES

|                   |   |
|-------------------|---|
| Support Services  | Service from the Start Advance Exchange Support |
| Advanced Services | RFID Design and Deployment Services             |

## REGULATORY COMPLIANCE

|            |   |
|------------|---|
| Safety     | UL 60950-01, UL 2043, IEC 60950-1, EN 60950-1   |
| RF/EMI/EMC | FCC Part 15, RSS 210, EN 302 208, ICES-003 Class B, EN 301 489-1/3<br>For Malaysia: 919-923 MHz |
| SAR/MPE    | FCC 47CFR2:OET Bulletin 65; EN 50364  |
| Other      | ROHS, WEEE  |

## WARRANTY

The FX9500-4 and FX9500-8 are 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.



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