# ST5500 Transition RFID Reader

## Track inventory location and direction

Whether you are a retailer, distributor or manufacturer, you need to know more than the presence of tagged items to harness the power of inventory visibility; you also need to know which direction items are traveling. While standard RFID readers detect presence only, Zebra's pre-configured, ST5500 transition RFID reader tracks items on the move, providing presence and enabling direction.



**A New Layer of Business Intelligence**

Zebra's ST5500 transition RFID reader tracks direction to give you an additional layer of business intelligence, so you can better manage inventory and prevent lost sales, stockouts, theft, and unplanned downtime on the manufacturing plant floor. Plus, with the data over time, you can identify process gaps and improve inventory workflows. The ST5500 provides you with which way a tag is moving through the portal so you can automatically remove it from stock when it goes from the stock room to the sales floor.

**Designed for Challenging Areas**

Zebra's ST5500 transition RFID reader works in virtually any area in your facility—from your main building entry and exit areas, including the receiving and loading docks, to interior transition points such as the warehouse and plant floor in a manufacturing plant, it is designed to meet specific needs in challenging areas, such as backrooms and aisles where metal, fluorescent lights and more can create interference. This product is also at home in aisles and will-call areas that require very tight read ranges.

**Ready-to-Use, Easy Deployment**

Everything you need is already pre-configured and ready to go. Simply suspend from the ceiling or mount on a wall for fast and easy deployment. There's no need to add any additional components since this transition reader includes both the reader and antennas into one housing. Take your competitive advantage to the next level and gain a greater level of inventory intelligence with Zebra's ST5500 transition RFID reader.

**Track inventory movement in real time for a real competitive advantage**

For more information, please visit www.zebra.com/rfidreaders

# Specifications

## Physical Characteristics

| | |
|---|---|
| Dimensions | 47.0 in. L x 22.0 in. W x 9.0 in. D<br>(19.56 cm L x 14.99 cm W x 4.32 cm D) |
| Weight | 23 lbs./10.4 kg |

## Environmental

| | |
|---|---|
| Operating Temp. | -4° to +131° F/-20° to +55° C |
| Storage Temp. | -40° to +158° F/-40° to +70° C |
| Humidity | 95% RH non-condensing |
| ESD | ± 15 kV air discharge; ± 8 kV direct dishcarge;<br>± 8 kV indirect dishcarge |

## Power Requirements

| | |
|---|---|
| Input Power | 18W max (37-55 VDC POE) |

## Connectivity

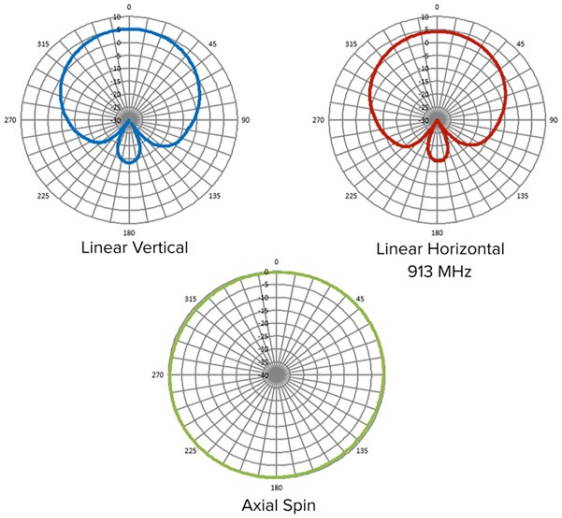
| | |
|---|---|
| Communications | 10/100 BaseT Ethernet (RJ45) w/ POE support;<br>USB Client (USB Type B), USB Host Port (Type A) |
| General Purpose I/O | 2 inputs, 3 outputs, optically isolated<br>(Terminal Block) |
| Power Supply | POE, POE+ or +24V DC (UL Approved)<br>12V-48VDC operation can be supported |
| Antenna Ports | FX 7500-2: 2 monostatic ports<br>(Reverse Polarity TNC)FX 7500-4: 4 monostatic ports<br>(Reverse Polarity TNC) |

## Hardware, OS and Firmware Management

| | |
|---|---|
| Processor | Texas Instruments AM3505 (600 Mhz) |
| Memory | Flash 512 MB; DRAM 256 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); RDMP |
| Network Services | DHCP, HTTPS, FTPS, SFPT, SSH, HTTP, FTP, SNMP and NTP |
| Network Stack | IPv4 and IPv6 |
| Security | Transport Layer Security Ver 1.2, FIPS-140 |
| Air Protocols | EPCglobal UHF Class 1 Gen2, ISO 18000-6C |
| Frequency (UHF Band) | Global Reader: 902 MHz – 928 MHz<br>(Maximum, supports countries that use a part of this band), 865 MHz – 868 MHz US (only)<br>Reader: 902 MHz – 928 MHz |
| Transmit Power Output | 10 dBm to +31.5 dBm (POE+, 12V ~ 48V External DC, Universal 24V DC Power Supply);<br>+10 dBm to +30.0 dBm (POE) |
| Max. Receive | -82 dBm |

## Warranty

The ST5500 transition RFID reader is warrantied 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.




# Markets and Applications

**Warehouse and Distribution**

- Shipping and receiving
- Inventory

**Retail**

- Front and back room
- Shipping and receiving

**Manufacturing**

- Shipping and receiving
- Inventory

## Hardware, OS and Firmware Management

| | |
|---|---|
| Sensitivity | |
| IP addressing | Static and Dynamic |
| Host Interface Protocol | LLRP |
| API Support | Host Applications – .NET, C and Java EMDK; Embedded Applications – C & Java SDK |


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