



## FX7400/FX7500 Technical Accessory Guide




Note: FX7400 discontinued 6/2014


NOTE: This document is only for general reference. Solutions Pathway and related PMBs should be used for product availability, pricing, and final solution selection.



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### Communication Cables




Part Number	Picture	Description	Notes	Required Items
25-64396-01R		USB Cable		

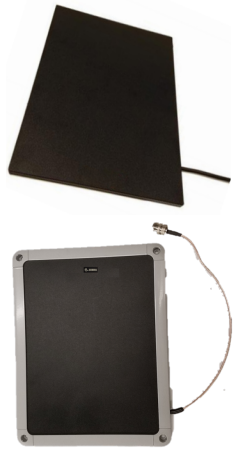



### Reader/Antenna Kits

Part Number	Picture	Description	Notes	Required Items
ST5500-SR01000SSNA (US frequency)  ST5500-SR01000SSEU (European-ETSI frequency)		Overhead/Ceiling Mount All-in-One Transition Reader	<ul style="list-style-type: none"> <li>► All-in-one transition point fixed reader combines an FX7500 fixed reader with four antennas in a single package, allowing customers to track inventory and assets as it moves through entry/exit points across the enterprise.</li> <li>► Includes <b>FX7500</b>, four optimally angled integrated antennas (with cables) and two carabiners (for hanging portal) in one package.</li> <li>► Antennas are left hand circular polarized, gain-max 9 dBic, gain linear max 6 dBil.</li> <li>► Suspend from the ceiling for fast and easy installation in any environment.</li> <li>► Supports Power-Over-Ethernet (PoE)</li> <li>► Dimensions: 47.0 in. x 22.0 in. x 9.0 in. / 1194 mm x 559 mm x 229 mm</li> <li>► Weight: 23 lbs. / 10.4 kg</li> <li>► Requires non-Zebra provided software to determine which direction an item is traveling. Does not include any analytical/directionality software.</li> </ul>	Power Supply and AC Line Cord OR Use Power Over Ethernet (PoE)



<p>ST5501-SR01000SSNA (US frequency)</p> <p>ST5501-SR01000SSEU (European-ETSI frequency)</p>		<p>Indoor Wall Mount Transition Reader Kit</p>	<p>► Transition point fixed reader kit designed for use in indoor environments - combines an FX7500 fixed reader with four antennas, allowing customers to track inventory and assets as it moves through entry/exit points across the enterprise.</p> <p>► Kit includes <b>FX7500 reader</b> (including bracket for mounting FX7500 to wall), four antennas, four optimally angled antenna brackets, and four 7 ft. / ~2 m. antenna cables.</p> <p>► Antennas are left hand circular polarized, gain-max 9 dBic, gain linear max 6 dBil.</p> <p>► Install on a wall for fast and easy installation in any indoor environment.</p> <p>► Supports Power-Over-Ethernet (PoE)</p> <p>► Requires non-Zebra provided software to determine which direction an item is traveling . Does not include any analytical/directionality software.</p>	<p>Power Supply and AC Line Cord OR Use Power Over Ethernet (PoE)</p>
<p>ST5502-SR01000SSNA (US frequency)</p> <p>ST5502-SR00000SSEU (European-ETSI frequency)</p>		<p>Outdoor Wall Mount Transition Reader Kit</p>	<p>► Transition point fixed reader kit designed for outdoor environments (such as retail garden centers) - combines an FX7500 fixed reader with four antennas, allowing customers to track inventory and assets as it moves through entry/exit points across the enterprise.</p> <p>► Kit includes <b>FX7500 reader</b> (including bracket for mounting FX7500 to wall), four antennas, four optimally angled antenna brackets with band clamps for securing brackets to building trusses, and four 50 ft./ 15 m. antenna cables.</p> <p>► Install on a wall for fast and easy installation in any indoor/outdoor environment.</p> <p>► Antennas are left hand circular polarized, gain-max 9 dBic, gain linear max 6 dBil.</p> <p>► Supports Power-Over-Ethernet (PoE)</p> <p>► Requires non-Zebra provided software to determine which direction an item is traveling . Does not include any analytical/directionality software.</p>	<p>► Power Supply and AC Line Cord OR Use Power Over Ethernet (PoE)</p> <p>► NEMA box may also be required for FX7500 depending on installation location.</p>
Antennas				
Part Number	Picture	Description	Notes	Required Items

SR5502-SR01000SSNA (US frequency)  SR5502-SR01000SSEU (European-ETSI frequency)		Overhead/Ceiling Mount Star Antenna kit - dual antennas  	<ul style="list-style-type: none"> <li>► Designed to optimize tag reads as they move from aisle to aisle, room to room.</li> <li>► Antennas are designed to be overhead/ceiling mounted.</li> <li>► Includes two optimally angled antennas, two carabiners (for hanging antennas) and two 17 ft. / ~5 m. cables for connection to FX reader.</li> <li>► Antennas are left hand circular polarized,, gain-max 9 dBic, gain linear max 6 dBil</li> </ul>	
SR5500-SR01000SSNA (US frequency)  SR5500-SR01000SSEU (European-ETSI frequency)		Overhead/Ceiling Mount Star Antenna kit - single antenna  	<ul style="list-style-type: none"> <li>► Designed to optimize tag reads as they move from aisle to aisle, room to room.</li> <li>► Antenna is designed to be overhead/ceiling mounted.</li> <li>► Includes one optimally angled antenna, two carabiners (for hanging antenna) and one 17 ft. / ~5 m. cable for connection to FX reader.</li> <li>► Antenna is left hand circular polarized,, gain-max 9 dBic, gain linear max 6 dBil</li> </ul>	
SR5200-SR01000SSNA (US frequency)  SR5200-SR01000SSEU (European-ETSI frequency)		Wall Mount Star Antenna kit - single antenna  	<ul style="list-style-type: none"> <li>► Designed to optimize tag reads as they move from aisle to aisle, room to room.</li> <li>► Antenna is designed to be wall mounted.</li> <li>► Includes one antenna with mounting bracket and one 17 ft. / ~5 m. cable for connection to FX reader.</li> <li>► Antenna is left hand circular polarized,, gain-max 9 dBic, gain linear max 6 dBil</li> </ul>	
SP5502-SR01000SSNA (US frequency)  SP5502-SR01000SSEU (European-ETSI frequency)		Overhead (POS) Antenna kit  	<ul style="list-style-type: none"> <li>► Designed to track items through Point of Sale (POS) or other areas.</li> <li>► Antenna is designed to be overhead/ceiling mount suspended.</li> <li>► Includes antenna and 17 ft. cable for connection to FX reader.</li> </ul>	



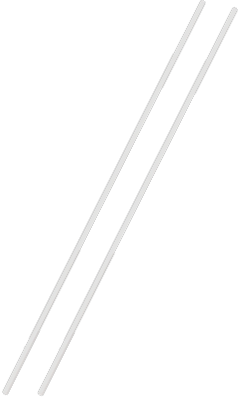
<p>SP5504-SR01000SSNA (US frequency)</p> <p>SP5504-SR01000SSEU (European-ETSI frequency)</p>		<p>Localized (POS) Antenna kit</p>	<ul style="list-style-type: none"> <li>► Designed to track items through Point of Sale (POS) or other small footprint areas.</li> <li>► Highly localized RFID antenna solution covers area approximately 2 ft. x 2ft.</li> <li>► Antenna is designed to be overhead/ceiling mount suspended.</li> <li>► Includes antenna, 20 ft. cable for connection to FX reader, and hang wire for suspending antenna.</li> <li>► Antenna is left hand circular polarized gain-max 7.3 dBic, gain linear max 4.9 dBil</li> <li>► Antenna can be suspended from ceiling using included hang wire or optional Mounting Pole (HN-001187-01 or HN-000537-01) can be used.</li> <li>► Dimensions: 7 in. height x 7.3 in. diameter</li> <li>► Weight: 2.2 lbs.</li> </ul>	
<p>AN510-CFCL60001US (US frequency)</p> <p>AN510-CFCL60002EU (European-ETSI frequency)</p>		<p>AN510 Ultra-Low Profile Indoor/Outdoor Antenna Kit (Flush Mount)</p>	<ul style="list-style-type: none"> <li>► IP67 rating allows antenna to be used in a wide range of indoor and outdoor environments</li> <li>► Dimensions: 9.8 in. L x 9.8 in. W x 0.55 in. D (250 mm x 250 mm x 14 mm)</li> <li>► Weight: 1.6 lbs.</li> <li>► ~ 8.5 dB gain</li> <li>► 68° vertical and 68° horizontal beam width.</li> <li>► Flush mounting can be accommodated by attaching via screws or bolts through the corner holes in the housing.</li> <li>► Polarization: RHCP</li> <li>► Kit includes AN510 Antenna (AN510-FCL60001US or AN510-FCL60002EU) and IP67 Rated Pigtail Cable (CBLRD-7B8020140R)</li> </ul>	<p>One RF Antenna Cable (CBLRD-1B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader</p>
<p>AN510-CSCL60003US (US frequency)</p> <p>AN510-CSCL60004EU (European-ETSI frequency)</p>		<p>AN510 Ultra-Low Profile Indoor/Outdoor Antenna Kit (VESA/Studded Mount)</p>	<ul style="list-style-type: none"> <li>► IP67 rating allows antenna to be used in a wide range of indoor and outdoor environments</li> <li>► Dimensions: 9.8 in. L x 9.8 in. W x 0.55 in. D (250 mm x 250 mm x 14 mm)</li> <li>► Weight: 1.6 lbs.</li> <li>► ~ 8.5 dB gain</li> <li>► 68° vertical and 68° horizontal beam width.</li> <li>► Includes 4 Studded mounts in 100mm VESA pattern allowing antenna to be mounted using common brackets.</li> <li>► Polarization: RHCP</li> <li>► Kit includes AN510 Antenna (AN510-SCL60003US or AN510-SCL60004EU) and IP67 Rated Pigtail Cable (CBLRD-7B8020140R)</li> </ul>	<p>One RF Antenna Cable (CBLRD-1B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader</p>

AN610-SCL71129US (US frequency)  AN610-SCL71128EU (European-ETSI frequency)		AN610 Slim General Purpose Indoor Antenna	<ul style="list-style-type: none"> <li>▶ Designed for carpeted space and customer-facing environments (i.e. under POS counter)</li> <li>▶ Dimensions: 10.8 in. L x 8.5 in. W x 0.3 in. D</li> <li>▶ Weight: 1.1 lbs.</li> <li>▶ ~ 3 dB gain</li> <li>▶ 60° vertical and 80° horizontal beam width.</li> <li>▶ Has integrated mounting holes within ABS plastic frame and includes 1 ft pigtail cable</li> <li>▶ Uses Zebra's standard antenna cables</li> <li>▶ Polarization: LHCP</li> <li>▶ Rev C version of antenna (top picture) has a thinner profile by removing the gray border/frame that surrounds the antenna on Rev A and B versions (bottom picture) - see PMB 3121.</li> </ul>	One RF Antenna Cable (CBLRD-1B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader
SP5505-SR00000SSNA (US frequency)  SP5505-SR00000SSEU (European-ETSI frequency)		AN610 Slim General Purpose Indoor Antenna Under Counter KIT	<ul style="list-style-type: none"> <li>▶ Kit allows AN610 to be mounted under counter. Typically used in retail environments with SmartLens solution.</li> <li>▶ ~ 3 dB gain</li> <li>▶ 60° vertical and 80° horizontal beam width.</li> <li>▶ Kit includes: <ul style="list-style-type: none"> <li>- AN610 antenna (AN610-SCL71129US or AN610-SCL71128EU)</li> <li>- 20 ft. white antenna extension cable</li> <li>- Under counter mounting tray</li> <li>- Screws for mounting tray</li> <li>- self stick clips for routing antenna cable to FX reader.</li> </ul> </li> </ul>	
AN620-SCL71131US (US frequency)  AN620-SCL71130EU (European-ETSI frequency)		AN620 Slim General Purpose Indoor Antenna	<ul style="list-style-type: none"> <li>▶ Designed for carpeted space and customer-facing environments (i.e. under POS counter)</li> <li>▶ Dimensions: 15.4 in. L x 10.8 in. W x 0.47 in. D</li> <li>▶ Weight: 2.2 lbs.</li> <li>▶ ~ 3 dB gain</li> <li>▶ 48° vertical and 75° horizontal beam width.</li> <li>▶ Has integrated mounting holes within ABS plastic frame and includes 1 ft pigtail cable</li> <li>▶ Uses Zebra's standard antenna cables</li> <li>▶ Polarization: LHCP</li> </ul>	One RF Antenna Cable (CBLRD-1B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader
AN720-L51NF00WUS (US frequency) - AN720-L51NF00WEU (European-ETSI frequency)		AN720 Compact Rugged Indoor-Outdoor Antenna	<ul style="list-style-type: none"> <li>▶ Designed to withstand exposure to rain, snow and extreme temperature - ideal for the receiving dock doors or outdoor shopping areas</li> <li>▶ Dimensions: 5.2 in. L x 5.2 in. W x 0.7 in. D</li> <li>▶ Weight: 0.8 lbs.</li> <li>▶ IP67 rated</li> <li>▶ ~ 3 dB gain</li> <li>▶ 100° beam width - for even wider coverage</li> <li>▶ Comes complete with an articulating mount</li> <li>▶ Uses Zebra's standard antenna cables</li> <li>▶ Polarization: LHCP</li> </ul>	One RF Antenna Cable (CBLRD-1B400...)


AN480-CL66100WR (Left circular polarization) - AN480-CR66100WR (Right circular polarization)		AN480 High-Performance Worldwide Indoor Antenna	<ul style="list-style-type: none"> <li>► This single port indoor antenna offers the maximum flexibility and performance required to meet the needs of enterprises around the world.</li> <li>► Dimensions: 10.2 in. L x 10.2 in. W x 1.98 in. D</li> <li>► Weight: 3 lbs.</li> <li>► Polarization: LHCP or RHCP</li> </ul>	One RF Antenna Cable (CBLRD-1B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader
AN440-CPDFQ915WR		AN440 High Performance Area Antenna	<ul style="list-style-type: none"> <li>► Dimensions: 28.3 in. L x 12.5 in. W x 1.5 in. D</li> <li>► Weight: 8 lbs.</li> <li>► Polarization: Two circular polarized patch array</li> </ul>	Two RF Antenna Cables (CBLRD-1B400...)
Jamison RFID Portal antennas (3rd party) *		Portal Antennas		
<a href="http://jamisondoor.com/product-families/rfid-portals/">http://jamisondoor.com/product-families/rfid-portals/</a>				
<b>Antenna Accessories</b>				
(3rd party) *		N Female to Reverse-Polarity TNC Male Adapter	<ul style="list-style-type: none"> <li>► Allows antennas with pigtail cable to be directly connected to FX reader</li> <li>► Allows for compact installations where the reader and antenna will be mounted close to each other (i.e. under counter installations)</li> </ul>	
<a href="http://www.amazon.com/gp/product/B001E7PAEW?keywords=reverse%20tnc%20end%20connector&amp;qid=1445460516&amp;ref=sr_1_1&amp;sr=8-1">http://www.amazon.com/gp/product/B001E7PAEW?keywords=reverse%20tnc%20end%20connector&amp;qid=1445460516&amp;ref=sr_1_1&amp;sr=8-1</a>				

CBLRD-7B8020140R		IP67 Rated RF Pigtail Antenna Cable	<ul style="list-style-type: none"> <li>▶ This cable normally connects AN510 Indoor/Outdoor antennas to standard Zebra RFID antenna cables.</li> <li>▶ Normally included with each AN510 antenna Kit.</li> <li>▶ Cable is IP67 rated.</li> <li>▶ Cable length is approx 14 in.</li> </ul>	
CBLRD-1B4000680R		RF Antenna Cable (68\"/>	<ul style="list-style-type: none"> <li>▶ Cable connects RFID antenna to reader.</li> <li>▶ Type LMR240 cable</li> </ul>	
CBLRD-1B4001800R		RF Antenna Cable (180\"/>	<ul style="list-style-type: none"> <li>▶ Cable connects RFID antenna to reader.</li> <li>▶ Type LMR240 cable</li> </ul>	
CBLRD-1B4002400R		RF Antenna Cable (240\"/>	<ul style="list-style-type: none"> <li>▶ Cable connects RFID antenna to reader.</li> <li>▶ Type LMR240 cable</li> </ul>	
CBLRD-1B4003600R		RF Antenna Cable (360\"/>	<ul style="list-style-type: none"> <li>▶ Cable connects RFID antenna to reader.</li> <li>▶ Type LMR240 cable</li> </ul>	
BRKT-70661-01R		Standard RFID Antenna Mounting Kit		




BRKT-70662-01R		Heavy Duty RFID Antenna Mounting Kit	► Has 16" extension arm	
HN-001187-01		Standard Length Mounting Pole for POS Antenna	► Designed to allow POS Antenna (SP5504) to be suspended from ceilings ► Pole is 6 ft. long and is intended to be used for ceilings that are 14 ft. or under in height.	
HN-000537-01		Extended Length Mounting Pole for POS Antenna	► Designed to allow POS Antenna (SP5504) to be suspended from ceilings ► Intended to be used for ceilings that are more than 14 ft. in height. ► Includes two 6 ft. long poles which can be nested together to form varying lengths of +6 ft to under 12 ft. (one pole is the HN-001187-01 Standard Length Mounting Pole)	

### Wireless Communications Adapters

Part Number	Picture	Description	Notes	Required Items
various (3rd party) *  ALFA Network: AWUS036H - Realtek RTL8187L CCrane: Versa Wifi USB Adapter II - Realtek RTL8187L		USB WiFi Adapter for FX7500	► FX7500 natively supports USB WiFi adapters with the Realtek chipset RTL 8187 ► Adapters listed have been tested by Zebra	




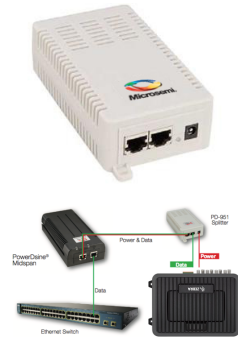




various (3rd party) *		USB Bluetooth Adapter for FX7500	<ul style="list-style-type: none"> <li>► FX7500 natively supports certain Bluetooth adapters.</li> <li>► Adapters listed have been tested by Zebra</li> </ul>	
Asus: Mini Bluetooth 2.1 Dongle USB-BT211 MediaLink: Bluetooth 4.0 Dongle MUA-BA3				
RV50X (3rd party) *		Sierra Wireless AirLink® RV50X Cellular Modem	<ul style="list-style-type: none"> <li>► Allows FX reader to be connected to LTE cellular networks for mobile usage.</li> <li>► Provides a great way to use the FX's Network Connect for Ethernet/IP (connection to PLCs) feature in a distributed environment.</li> <li>► Also includes GPS radio to capture location of RFID reads.</li> <li>► Connects to FX reader via Ethernet port.</li> </ul>	
<a href="https://www.sierrawireless.com/">https://www.sierrawireless.com/</a>				
<b>GPIO devices</b>				
Part Number	Picture	Description	Notes	Required Items
SM312D (3rd party) *		Photo Eye		
<a href="http://www.bannerengineering.com/">http://www.bannerengineering.com/</a>				
PREF-301-RYG (3rd party) *		Light Stack		
<a href="http://eng.menics.co.kr/">http://eng.menics.co.kr/</a>				
<b>Misc</b>				
Part Number	Picture	Description	Notes	Required Items

(3rd party) * Contact Michael Crudele  <a href="http://www.arcantenna.com/">http://www.arcantenna.com/</a>		NEMA Enclosure		
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## Power Cords/Power Supplies

NOTE: FX7500 supports either 24V Power Supply, 802.3af (PoE) or 802.3af (PoE+). PoE/PoE+ will only power the FX7500, not any auxillary GPIO devices (i.e. alarms, light stacks, motion sensors, etc.) attached to it.

Part Number	Picture	Description	Notes	Required Items
PWR-BGA24V78W1WW		Power Supply for FX7400/FX7500/FX9500 and FX9600	<ul style="list-style-type: none"> <li>▶ 24V, 3.25A, 78W</li> <li>▶ Uses locking connector. Connect to FX reader and rotate clockwise 1/4 turn to lock power cable into reader.</li> <li>▶ Provides US DOE Level VI compliance for power efficiency.</li> <li>▶ Has increased operating temperature range vs. PWR-BGA24V78W0WWW - 20C to +55C. This matches the operating temperature spec of the FX9600. PWR-BGA24V78W0WWW is typically used with the FX7400/FX7500.</li> </ul>	23844-00-00R
ZE2435-4932 (3rd party) *  <a href="https://lindelectronics.com/">https://lindelectronics.com/</a>		Vehicle Power Supply for FX7400/FX7500/FX9500 and FX9600 - Cigarette Lighter adapter	<ul style="list-style-type: none"> <li>▶ Allows FX reader to be powered from a 12V vehicle cigarette lighter adapter.</li> </ul>	
ZE2435I-4946 (3rd party) *  <a href="https://lindelectronics.com/">https://lindelectronics.com/</a>		Vehicle Power Supply for FX7400/FX7500/FX9500 and FX9600 - bare wire connector	<ul style="list-style-type: none"> <li>▶ Allows FX reader to be powered from a vehicle.</li> <li>▶ Isolated adapter is rated for 20-60V input.</li> </ul>	
PD-AS-951/12-24 (POE Splitter) (3rd party) *  <a href="https://www.microsemi.com">https://www.microsemi.com</a>		24V PoE Power Supply solution	<ul style="list-style-type: none"> <li>▶ Used to power FX unit via Power over Ethernet (PoE) at full 24V power.</li> <li>▶ PoE will power FX unit AND additional auxillary devices via the GPIO port (i.e. alarms, light stacks, motion sensors, etc.).</li> <li>▶ Requires two components: <ol style="list-style-type: none"> <li>1. Midspan/Power Injector that will provide power on Ethernet switch end. Exact model of Midspan is customer/installation specific.</li> <li>2. PoE Splitter that will separate data from power on FX unit end and connect to barrel jack power connector and Ethernet port on FX unit.</li> </ol> </li> </ul>	Will require DC Line cord (barrel jack connector) to connect POE Splitter to FX unit
50-16000-221R		AC Line Cord	<ul style="list-style-type: none"> <li>▶ Used to power Direct Connect power supplies (i.e. PWRS-14000-260R ).</li> <li>▶ This AC Line Cord is for use in North America. See the <b>AC Line Cords by Country</b> TAG for comparable line cords to use in other countries.</li> </ul>	

23844-00-00R		AC Line Cord	<p>► Used to power Direct Connect power supplies (i.e. PWR-BGA24V78W1WW) and 802.3at Power Injector.</p> <p>► This AC Line Cord is for use in North America. See the <b>AC Line Cords by Country</b> TAG for comparable line cords to use in other countries.</p>	
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