



FX9500/FX9600 Technical Accessory Guide




NOTE: FX9500 discontinued 11/2017 - see PMB 3037


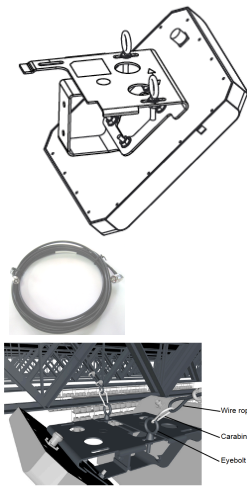
NOTE: This document is only for general reference. Solution Builder and related PMBs should be used for product availability, pricing, and final solution selection.

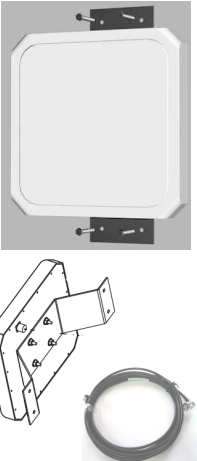


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Communication Cables


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






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"> ►Designed to optimize tag reads as they move from aisle to aisle, room to room. ►Antennas are designed to be overhead/ceiling mounted. ►Includes two optimally angled antennas, two carabiners (for hanging antennas) and two 17 ft. / ~5 m. cables for connection to FX reader. ►Antennas are left hand circular polarized,, gain-max 9 dBic, gain linear max 6 dBil 	
SR5500-SR01000SSNA (US frequency) SR5500-SR01000SSEU (European-ETSI frequency)		Overhead/Ceiling Mount Star Antenna kit - single antenna	<ul style="list-style-type: none"> ►Designed to optimize tag reads as they move from aisle to aisle, room to room. ►Antenna is designed to be overhead/ceiling mounted. ►Includes one optimally angled antenna, two carabiners (for hanging antenna) and one 17 ft. / ~5 m. cable for connection to FX reader. ►Antenna is left hand circular polarized,, gain-max 9 dBic, gain linear max 6 dBil 	

<p>SR5200-SR01000SSNA (US frequency)</p> <p>SR5200-SR01000SSEU (European-ETSI frequency)</p>		<p>Wall Mount Star Antenna kit - single antenna</p>	<ul style="list-style-type: none"> ▶Designed to optimize tag reads as they move from aisle to aisle, room to room. ▶Antenna is designed to be wall mounted. ▶Includes one antenna, antenna mounting bracket and one 17 ft. / ~5 m. cable for connection to FX reader. ▶Antenna is left hand circular polarized, gain-max 9 dBic, gain linear max 6 dBil 	
<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"> ▶Designed to track items through Point of Sale (POS) or other small footprint areas. ▶Highly localized RFID antenna solution covers area approximately 2 ft. x 2ft. ▶Antenna is designed to be overhead/ceiling mount suspended. ▶Includes antenna, 20 ft. cable for connection to FX reader, and hang wire for suspending antenna. ▶Antenna is left hand circular polarized, gain-max 7.3 dBic, gain linear max 4.9 dBil ▶Antenna can be suspended from ceiling using included hang wire or optional Mounting Pole (HN-001187-01 or HN-000537-01) can be used. ▶Dimensions: 7 in. height x 7.3 in. diameter ▶Weight: 2.2 lbs. 	
<p>AN510-CFCL60001US (US frequency)</p> <p>AN510-CFCL60002EU (European-ETSI frequency)</p>		<p>AN510 Ultra-Low Profile Indoor/Outdoor Antenna (Flush Mount)</p>	<ul style="list-style-type: none"> ▶IP67 rating allows antenna to be used in a wide range of indoor and outdoor environments ▶Dimensions: 9.8 in. L x 9.8 in. W x 0.55 in. D (250 mm x 250 mm x 14 mm) ▶Weight: 1.6 lbs. ▶~ 8.5 dB gain ▶68° vertical and 68° horizontal beam width. ▶Flush mounting can be accommodated by attaching via screws or bolts through the corner holes in the housing. ▶Requires IP67 Rated Pigtail cable which then allows use of Zebra's standard antenna cables. ▶Polarization: RHCP ▶Includes IP67 Rated Pigtail Cable (CBLRD-7B8020140R) 	<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 (VESA/Studded Mount)</p>	<ul style="list-style-type: none"> ▶IP67 rating allows antenna to be used in a wide range of indoor and outdoor environments ▶Dimensions: 9.8 in. L x 9.8 in. W x 0.55 in. D (250 mm x 250 mm x 14 mm) ▶Weight: 1.6 lbs. ▶~ 8.5 dB gain ▶68° vertical and 68° horizontal beam width. ▶Includes 4 Studded mounts in 100mm VESA pattern allowing antenna to be mounted using common brackets. ▶Requires IP67 Rated Pigtail cable which then allows use of Zebra's standard antenna cables. ▶Polarization: RHCP ▶Includes IP67 Rated Pigtail Cable (CBLRD-7B8020140R) 	<p>One RF Antenna Cable (CBLRD-1B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader</p>
<p>AN610-SCL71129US (US frequency)</p> <p>AN610-SCL71128EU (European-ETSI frequency)</p>		<p>AN610 Slim General Purpose Indoor Antenna</p>	<ul style="list-style-type: none"> ▶Designed for carpeted space and customer-facing environments (i.e. under POS counter) ▶Dimensions: 10.8 in. L x 8.5 in. W x 0.3 in. D ▶Weight: 1.1 lbs. ▶~ 3 dB gain ▶60° vertical and 80° horizontal beam width. ▶Has integrated mounting holes within ABS plastic frame and includes 1 ft pigtail cable ▶Uses Zebra's standard antenna cables ▶Polarization: LHCP ▶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. 	<p>One RF Antenna Cable (CBLRD-1B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader</p>
<p>AN620-SCL71131US (US frequency)</p> <p>AN620-SCL71130EU (European-ETSI frequency)</p>		<p>AN620 Slim General Purpose Indoor Antenna</p>	<ul style="list-style-type: none"> ▶Designed for carpeted space and customer-facing environments (i.e. under POS counter) ▶Dimensions: 15.4 in. L x 10.8 in. W x 0.47 in. D ▶Weight: 2.2 lbs. ▶~ 3 dB gain ▶48° vertical and 75° horizontal beam width. ▶Has integrated mounting holes within ABS plastic frame and includes 1 ft pigtail cable ▶Uses Zebra's standard antenna cables ▶Polarization: LHCP 	<p>One RF Antenna Cable (CBLRD-1B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader</p>
<p>AN720-L51NF00WUS (US frequency)</p> <p>- AN720-L51NF00WEU (European-ETSI frequency)</p>		<p>AN720 Compact Rugged Indoor-Outdoor Antenna</p>	<ul style="list-style-type: none"> ▶Designed to withstand exposure to rain, snow and extreme temperature - ideal for the receiving dock doors or outdoor shopping areas ▶Dimensions: 5.2 in. L x 5.2 in. W x 0.7 in. D ▶Weight: 0.8 lbs. ▶IP67 rated ▶~ 3 dB gain ▶100° beam width - for even wider coverage ▶Comes complete with an articulating mount ▶Uses Zebra's standard antenna cables ▶Polarization: LHCP 	<p>One RF Antenna Cable (CBLRD-1B400...)</p>


<p>AN480-CL66100WR (Left circular polarization) - AN480-CR66100WR (Right circular polarization)</p>		<p>AN480 High-Performance Worldwide Indoor Antenna</p>	<ul style="list-style-type: none"> ▶This single port indoor antenna offers the maximum flexibility and performance required to meet the needs of enterprises around the world. ▶Dimensions: 10.2 in. L x 10.2 in. W x 1.98 in. D ▶Weight: 3 lbs. ▶Polarization: LHCP or RHCP 	<p>One RF Antenna Cable (CBLRD-1B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader</p>
<p>AN440-CPDFQ915WR</p>		<p>AN440 High Performance Area Antenna</p>	<ul style="list-style-type: none"> ▶Dimensions: 28.3 in. L x 12.5 in. W x 1.5 in. D ▶Weight: 8 lbs. ▶Polarization: Two circular polarized patch array 	<p>Two RF Antenna Cables (CBLRD-1B400...)</p>
<p>Jamison RFID Portal antennas (3rd party) *</p> <p>http://jamisondoor.com/product-families/rfid-portals/</p>		<p>Portal Antennas</p>		
<p>Antenna Accessories</p>				
<p>(3rd party) *</p> <p>http://www.amazon.com/gp/product/B00IE7PAEW?keywords=reverse%20tnc%20end%20connector&qid=1445460516&ref=sr_1_1&sr=8-1</p>		<p>N Female to Reverse-Polarity TNC Male Adapter</p>	<ul style="list-style-type: none"> ▶Allows antennas with pigtail cable to be directly connected to FX reader ▶Allows for compact installations where the reader and antenna will be mounted close to each other (i.e. under counter installations) 	

CBLRD-7B8020140R		Spare RF Pigtail Antenna Cable (14" long)	<ul style="list-style-type: none"> ▶This is a spare cable that connects AN510 Indoor/Outdoor antennas to standard Zebra RFID cables. ▶Normally included with each AN510 antenna. ▶Cable is IP67 rated. 	
CBLRD-1B4000680R		RF Antenna Cable (68"/~5.5 ft. long)	<ul style="list-style-type: none"> ▶Cable connects RFID antenna to reader. ▶Type LMR240 cable 	
CBLRD-1B4001800R		RF Antenna Cable (180"/15 ft. long)	<ul style="list-style-type: none"> ▶Cable connects RFID antenna to reader. ▶Type LMR240 cable 	
CBLRD-1B4002400R		RF Antenna Cable (240"/20 ft. long)	<ul style="list-style-type: none"> ▶Cable connects RFID antenna to reader. ▶Type LMR240 cable 	
CBLRD-1B4003600R		RF Antenna Cable (360"/30 ft. long)	<ul style="list-style-type: none"> ▶Cable connects RFID antenna to reader. ▶Type LMR240 cable 	
BRKT-70661-01R		Standard RFID Antenna Mounting Kit.		
BRKT-70662-01R		Heavy Duty RFID Antenna Mounting Kit	<ul style="list-style-type: none"> ▶Has 16" extension arm 	

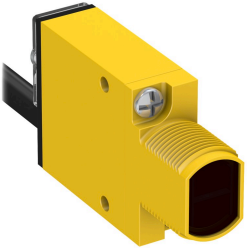

HN-001187-01		Standard Length Mounting Pole for POS Antenna	<ul style="list-style-type: none"> ►Designed to allow POS Antenna (SP5504) to be suspended from ceilings ►Pole is 6 ft. long and is intended to be used for ceilings that are 14 ft. or under in height. 	
HN-000537-01		Extended Length Mounting Pole for POS Antenna	<ul style="list-style-type: none"> ►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) 	

Misc

Part Number	Picture	Description	Notes	Required Items
various (3rd party) * TP-Link: AC 1200 - Realtek RTL8812AU ASUS: USB-AC56 - Realtek RTL8812AU ALFA Network: AWUS036AC - Realtek RTL8812AU ALFA Network: AWUS036H - Realtek RTL8187L CCrane: Versa Wifi USB Adapter II - Realtek RTL8187L		USB WiFi Adapter for FX9600	<ul style="list-style-type: none"> ►FX9600 natively supports USB WiFi adapters with the Realtek chipset RTL 8187 or RTL 8812AU. ►Adapters listed have been tested by Zebra 	



<p>various (3rd party) *</p> <p>various: Bluetooth 4.0 dongle - Qualcomm CSR8510 various: Bluetooth 3.0 dongle - Ralink RT5370L Asus: Mini Bluetooth 2.1 Dongle USB-BT211 MediaLink: Bluetooth 4.0 Dongle MUA-BA3</p>		<p>USB Bluetooth Adapter for FX9600</p>	<ul style="list-style-type: none"> FX9600 natively supports certain Bluetooth adapters. Adapters listed have been tested by Zebra 	
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GPIO devices

Part Number	Picture	Description	Notes	Required Items
<p>SM312D (3rd party) *</p> <p>http://www.bannerengineering.com/</p>		<p>Photo Eye</p>		
<p>PREF-301-RYG (3rd party) *</p> <p>http://eng.menics.co.kr/</p>		<p>Light Stack</p>		

Power Cords/Power Supplies

NOTE: FX9600 supports either 24V Power Supply, 802.3af (PoE) or 802.3af (PoE+). PoE/PoE+ will only power the FX9600, not any auxillary GPIO devices (i.e. alarms, light stacks, motion sensors, etc.) attached to it.

Part Number	Picture	Description	Notes	Required Items
<p>PWR-BGA24V78W1WW</p>		<p>Power Supply for FX7400/FX7500/FX9500 and FX9600</p>	<ul style="list-style-type: none"> Has increased operating temperature range vs. PWR-BGA24V78W0WW - 20C to +55C. This matches the operating temperature spec of the FX9600. 24V, 3.25A, 78W Provides US DOE Level VI compliance for power efficiency. 	<p>23844-00-00R</p>
<p>ZE2435-4932 (3rd party) *</p> <p>https://indelectronics.com/</p>		<p>Vehicle Power Supply for FX7400/FX7500/FX9500 and FX9600 - Cigarette Lighter adapter</p>	<ul style="list-style-type: none"> Allows FX reader to be powered from a 12V vehicle cigarette lighter adapter. 	

<p>ZE2435I-4946 (3rd party) *</p> <p>https://lindelectronics.com/</p>		<p>Vehicle Power Supply for FX7400/FX7500/FX9500 and FX9600 - bare wire connector</p>	<ul style="list-style-type: none"> ▶Allows FX reader to be powered from a vehicle. ▶Isolated adapter is rated for 20-60V input. 	
<p>PD-AS-951/12-24 (PoE Splitter) (3rd party) *</p> <p>https://www.microsemi.com</p>		<p>24V PoE Power Supply solution for FX9600</p>	<ul style="list-style-type: none"> ▶Used to power FX9600 via Power over Ethernet (PoE) at full 24V power. Not supported by FX9500. ▶PoE will power FX9600 AND additional auxillary devices via the GPIO port (i.e. alarms, light stacks, motion sensors, etc.). ▶Requires two components: <ol style="list-style-type: none"> 1. Midspan/Power Injector that will provide power on Ethernet switch end. Exact model of Midspan is customer/installation specific. 2. PoE Splitter that will separate data from power on FX9600 end and connect to barrel jack power connector and Ethernet port on FX9600. 	<p>Will require DC Line cord (barrel jack connector) to connect PoE Splitter to FX9600</p>
<p>POE29U-1AT(PL)D-R</p>		<p>Single-port High Power Gigabit 802.3at Power Injector</p>	<ul style="list-style-type: none"> ▶Used to power FX9600 via PoE ▶30W Single Port Power over Ethernet Midspan IEEE 802.3at Compliant Power Injector. 	<p>AC Line Cord (23844-00-00R)</p>
<p>50-16000-221R</p>		<p>AC Line Cord</p>	<ul style="list-style-type: none"> ▶Used to power Direct Connect power supplies (i.e. PWRS-14000-260R) 	
<p>23844-00-00R</p>		<p>AC Line Cord</p>	<ul style="list-style-type: none"> ▶Used to power Direct Connect power supplies (i.e. PWR-BGA24V78W1WW) and 802.3at Power Injector 	