

# Technical Accessory Guides (TAGs)

For Associates, Resellers, ISVs and Alliance Partners

Global



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## FXR90 Technical Accessory Guide



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



#### USB Cables

Part Number	Picture	Description	Notes	Required Items
CBL-USBACT015-M12 (1.5 meter, 5 ft. length)  CBL-USBACT035-M12 (3.5 meter, 11.5 ft. length)		USB-A Client Cable	<ul style="list-style-type: none"> <li>▶ USB client cable for connecting FXR90 to USB host devices.</li> <li>▶ A-coded M12 connector to USB-A male.</li> <li>▶ Connect to USB port on FXR90.</li> </ul>	
CBL-USBCCLT015-M12 (1.5 meter, 5 ft. length)  CBL-USBCCLT035-M12 (3.5 meter, 11.5 ft. length)		USB-C Client Cable	<ul style="list-style-type: none"> <li>▶ USB client cable for connecting FXR90 to USB host devices.</li> <li>▶ A-coded M12 connector to USB-C male.</li> <li>▶ Connect to USB port on FXR90.</li> </ul>	
CBL-USBCHST015-M12 (1.5 meter, 5 ft. length)  CBL-USBCHST035-M12 (3.5 meter, 11.5 ft. length)		USB-C Host Cable	<ul style="list-style-type: none"> <li>▶ USB host cable for connecting FXR90 to USB client devices.</li> <li>▶ A-coded M12 connector to USB-C female.</li> <li>▶ Connect to USB port on FXR90.</li> </ul>	
ADP-USB0010-M12		3-Way USB Splitter Cable	<ul style="list-style-type: none"> <li>▶ Cable provides three USB ports (2 USB Host and 1 USB Client).</li> <li>▶ A-coded M12 connector to three A-coded M12 connectors.</li> <li>▶ Connect to USB port on FXR90.</li> <li>▶ Cable length is 1 meter (3 ft.).</li> </ul>	<ul style="list-style-type: none"> <li>▶ Connect up to three USB Host or USB Client cables listed above to this cable.</li> </ul>

## Input/Output (I/O) GPIO Breakout Blocks



I/O Blocks may be used to create cleaner installations with less cable clutter

Part Number	Picture	Description	Notes	Required Items
BLOK-M12PN-01		GPIO Breakout Block	<ul style="list-style-type: none"> <li>► Features:                             <ul style="list-style-type: none"> <li>- Four 3 pin GPI connections (input)</li> <li>- Four 3 pin GPO connections (output)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>► FXR90 to Breakout Block GPIO Accessory Cable (CBL-GP0050-M12M12A or CBL-GP1050-M12M12A)</li> </ul>
CBL-GP0050-M12M12A		FXR90 to Breakout Block GPIO Accessory Cable	<ul style="list-style-type: none"> <li>► Cable used to Breakout Block to provide 8 GPIO connections.</li> <li>► Connect to GPIO port on FXR90 and M12 connector on Breakout Block.</li> <li>► A-coded 12 pin M12 female connector to M12 male connector</li> <li>► Cable length is 5 meters (16 ft.)</li> </ul> 	
CBL-GP1050-M12M12A		FXR90 to Breakout Block GPIO Accessory Cable with Power Input	<ul style="list-style-type: none"> <li>► Cable used to Breakout Block to provide 8 GPIO connections.</li> <li>► Connect to GPIO port on FXR90 and M12 connector on Breakout Block.</li> <li>► Also includes power input connector for providing power to GPIO accessories.</li> <li>► A-coded 12 pin M12 female connector to M12 male connector</li> <li>► Cable length is 5 meters (16 ft.)</li> </ul> 	<ul style="list-style-type: none"> <li>► DC Line Cord for IP67 Power Supplies (CBL-PWRD035-M12M12 or CBL-PWRD100-M12M12)</li> <li>► Power Supply (PWR-BGA24V90W0WW or PWR-BGA24V90W1WW)</li> </ul>
FWP-IOPLUGM-M8		Breakout Block to GPIO Accessory Adapter	<ul style="list-style-type: none"> <li>► Connects Breakout Block to GPIO accessories</li> <li>► M8 3-pin connector to flying leads (field wireable).</li> <li>► Uses HARAX® toolless rapid wiring termination.</li> </ul>	
<b>Ethernet Cables</b>				
Part Number	Picture	Description	Notes	Required Items

<p>CBL-ENT00101-M1200 (1M, 3 ft. length)</p> <p>CBL-ENT00301-M1200 (3M, 10 ft. length)</p> <p>CBL-ENT00501-M1200 (5M, 16 ft. length)</p> <p>CBL-ENT01501-M1200 (15M, 49 ft. length)</p>		<p>Ethernet Cable</p>	<ul style="list-style-type: none"> <li>▶ X-Coded M12 to RJ45 connectors</li> <li>▶ CAT6 cable supports POE+ for powering the FXR90.</li> </ul> 	
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**RFID Tunnels**









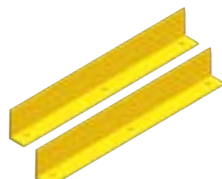

The Fixed RFID Tunnel reads tagged items as they pass through the tunnel on a conveyor belt. It can read tags on the boxes or bins as well as the tags on the contents of those boxes or bins. Software compares the items read with what was expected, and flags anything that does not match for investigation and correction. In many cases, the system will route flagged items to a different conveyor for inspection.


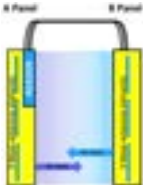

Part Number	Picture	Description	Notes	Required Items
<p>MWTS-T400-A-00AA</p>		<p>Fixed RFID Tunnel (No Reader)</p> 	<ul style="list-style-type: none"> <li>▶ Tunnel size is 36"Lx38"Wx60"H</li> <li>▶ Tunnel includes four Wave antennas; one on each side and two on the ceiling of the tunnel.</li> <li>▶ Tunnel is typically powered via AC power.</li> <li>▶ Includes:               <ul style="list-style-type: none"> <li>- RFID Tunnel</li> <li>- IP68 Enclosure for reader</li> <li>- Installation Hardware</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▶ FXR90 RFID reader.</li> </ul>

**Build-Your-Own Kits and Portal Replacement Items**

Use these accessories to build your own custom RFID portals and read zones or to replace damaged components from kits.






Part Number	Picture	Description	Notes	Required Items
<p>MWAO-A331-A-00AA</p>		<p>Photo Eye</p>	<ul style="list-style-type: none"> <li>▶ Photo Eye sensor can be used to trigger reading of tags when an object enters the field of view.</li> </ul>	
<p>MWAO-A046-A-00AA</p>		<p>Audible Stack Light</p>	<ul style="list-style-type: none"> <li>▶ Stack Light can be used to provide status, error or attention indicator to personnel.</li> </ul>	

MWAO-A297-A-00AA		Reflective Tape for Photo Eye	►4"x4" piece of reflective tape used to trigger Photo Eye sensor	
MWAO-A077-A-00AA (14 inch length) MWAO-A118-A-00AA (15 foot length) MWAO-A002-A-00AA (30 foot length) MWAO-A119-A-00AA (35 foot length) MWAO-A120-A-00AA (40 foot length) MWAO-A121-A-00AA (45 foot length) MWAO-A122-A-00AA (50 foot length)		RFID Antenna Cable	► Typically used to replace damaged cables on portals. ► Coaxial cable, RP-TNC Male to RP-TNC Male	
MWAO-A176-A-00AA		Bollard	► includes one 4 ft. tall bollard	
MWAO-A176-S-00AA		Bollard Set	► includes set of two 4 ft. tall bollards and installation hardware (bolts & washers)	
MWAO-A220-A-00AA		Angle Iron	► includes one yellow safety angle iron	
MWAO-A220-S-00AA		Angle Iron Set	► includes two yellow safety angle irons and installation hardware (bolts & washers)	

MWA0-A273-A-00AA		<p>Conduit Halo Kit</p> 	<p>► Kit is typically used to connect wiring from left and right panels on Dock Door Transition Portals.</p> <p>► Includes:</p> <ul style="list-style-type: none"> <li>- 15 ft. length yellow conduit with related hardware</li> </ul>	
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**Antennas**





Part Number	Picture	Description	Notes	Required Items
<p>SR5502-SR01000SSNA (US frequency)</p> <p>SR5502-SR01000SSEU (European-ETSI frequency)</p>		<p>Overhead/Ceiling Mount Star Antenna kit - dual antennas</p> 	<p>► Designed to optimize tag reads as they move from aisle to aisle, room to room.</p> <p>► Antennas are designed to be overhead/ceiling mounted.</p> <p>► Includes two optimally angled antennas, two carabiners (for hanging antennas) and two 17 ft. / ~5 m. cables for connection to FX reader.</p> <p>► Antennas are left hand circular polarized,, gain-max 9 dBic, gain linear max 6 dBil</p> <p>► Dimensions: 18.75 in. L x 10.75 in. W x 8.5 in. D (47.6 cm x 27.3 cm x 21.6 cm)</p> <p>► Weight: 8.5 lbs.</p>	
<p>SR5500-SR01000SSNA (US frequency)</p> <p>SR5500-SR01000SSEU (European-ETSI frequency)</p>		<p>Overhead/Ceiling Mount Star Antenna kit - single antenna</p> 	<p>► Designed to optimize tag reads as they move from aisle to aisle, room to room.</p> <p>► Antenna is designed to be overhead/ceiling mounted.</p> <p>► Includes one optimally angled antenna, two carabiners (for hanging antenna) and one 17 ft. / ~5 m. cable for connection to FX reader.</p> <p>► Antenna is left hand circular polarized,, gain-max 9 dBic, gain linear max 6 dBil</p> <p>► Dimensions: 16 in. L x 13.1 in. W x 7.1 in. D (40.6 cm x 33.3 cm x 18 cm)</p> <p>► Weight: 4.8 lbs.</p>	

<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"> <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> <li>▶ Dimensions: 16 in. L x 13.25 in. W x 7 in. D (40.6 cm x 33.7 cm x 18 cm)</li> <li>▶ Weight: 4.6 lbs.</li> </ul>	
<p>SP5502-SR01000SSNA (US frequency)</p> <p>SP5502-SR01000SSEU (European-ETSI frequency)</p> <p>▶ Discontinued 10/2022, see PMB 10901.</p>		<p>Overhead (POS) Antenna kit</p>	<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> <li>▶ Dimensions: 16 in. L x 13 in. W x 7 in. D (40.6 cm x 33 cm x 18 cm)</li> <li>▶ Weight: 5 lbs.</li> </ul>	<p>See <b>Antenna Mounting options</b> section below for mounting antenna:</p> <ul style="list-style-type: none"> <li>- from open ceiling</li> <li>- from drop ceiling</li> <li>- flush mount to ceiling</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>▶ Antenna uses SMA connector</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 CBLRD-3B400...)</p> <p>OR</p> <p>N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FXR 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>▶ Antenna uses SMA connector</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 CBLRD-3B400...)</p> <p>OR</p> <p>N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FX reader</p>
<p>AN520-FCL60010US (US frequency)</p> <p>AN520-FCL60011EU (European-ETSI frequency)</p>		<p>AN520 Ultra-Rugged Low Profile Indoor/Outdoor Antenna</p>	<ul style="list-style-type: none"> <li>▶ IP68 rating allows antenna to be used in a wide range of indoor and outdoor environments</li> <li>▶ Dimensions: 5.9 in. L x 5.9 in. W x 0.55 in. D (150 mm x 150 mm x 14 mm)</li> <li>▶ Weight: .55 lbs.</li> <li>▶ ~ 5.5 dB gain</li> <li>▶ 115° vertical and 115° 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>▶ Antenna uses SMA connector</li> <li>▶ Polarization: RHCP</li> </ul>	<ul style="list-style-type: none"> <li>▶ IP67 Rated Pigtail Cable (CBLRD-7B8020140R)</li> <li>▶ One RF Antenna Cable w/Type-N connector (CBLRD-1B400... or CBLRD-3B400...)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>▶ One RF Antenna Cable w/SMA connector (CBLRD-1C400...)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>▶ White 30 ft. Antenna Cable (CBL-SP5506-PW56)</li> </ul>
<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"> <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>▶ Polarization: LHCP</li> <li>▶ Antenna uses Type-N connector</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>	<p>One RF Antenna Cable (CBLRD-1B400... or CBLRD-3B400...)</p> <p>OR</p> <p>N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FXR reader</p>




<p>SP5505-SR00000SSNA (US frequency)</p> <p>SP5505-SR00000SSEU (European-ETSI frequency)</p>		<p>AN610 Slim General Purpose Indoor Antenna Under Counter KIT</p>	<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>	
<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"> <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>▶Antenna uses Type-N connector</li> <li>▶Polarization: LHCP</li> </ul>	<p>One RF Antenna Cable (CBLRD-1B400... or CBLRD-3B400...)</p> <p>OR</p> <p>N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FXR reader</p>
<p>AN650-FCL71325US (US frequency)</p> <p>AN650-FCL71324EU (European-ETSI frequency)</p>		<p>AN650 Ultra-Low Profile Ground/Mat Antenna</p>	<ul style="list-style-type: none"> <li>▶Antenna is optimized for RFID deployments involving moving products, assets and people. Antenna is ideal for applications where traditional side antennas are unsuitable or not optimized for the application.</li> <li>▶At just 8 mm / 0.3 in. thick, the durable, high performance AN650 is uniquely capable of lying flat on the ground within a doorway sized footprint and can withstand payloads of over 200 kg (440 lbs) making it ideal for use cases such as conference/trade show attendee tracking, employee/people tracking, loyalty marketing, and race timing.</li> <li>▶Dimensions: 915 mm x 305 mm x 8 mm (36 in x 12 in x .3 in)</li> <li>▶Weight: 4.4 lbs.</li> <li>▶~ 9 dB gain</li> <li>▶beam width 20° in XZ, 80° in YZ beam width</li> <li>▶Polarization: Circular</li> <li>▶Antenna uses SMA connector</li> </ul>	<ul style="list-style-type: none"> <li>▶IP67 Rated Pigtail Cable (CBLRD-7B8020140R)</li> <li>▶One RF Antenna Cable w/Type-N connector (CBLRD-1B400... or CBLRD-3B400...)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>▶One RF Antenna Cable w/SMA connector (CBLRD-1C400...)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>▶White 30 ft. Antenna Cable (CBL-SP5506-PW56)</li> </ul>





<p>AN720-L51NF00WUS (US frequency) - AN720-L51NF00WEU (European-ETSI frequency)</p>		<p>AN720 Compact Rugged Indoor-Outdoor Antenna</p>	<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>▶ Antenna uses Type-N connector</li> <li>▶ Polarization: LHCP</li> </ul>	<p>One RF Antenna Cable (CBLRD-1B400... or CBLRD-3B400...)</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"> <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> <li>▶ Antenna uses Type-N connector</li> </ul>	<p>One RF Antenna Cable (CBLRD-1B400... or CBLRD-3B400...) OR N Female to Reverse-Polarity TNC Male Adapter for connecting directly to FXR reader</p>
<p>KT-AN480-240B1</p>		<p>AN480 High-Performance Worldwide Indoor Antenna KIT</p>	<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: Left circular polarization (LHCP).</li> </ul> <p>Kit includes:</p> <ul style="list-style-type: none"> <li>- AN480 Antenna (AN480-CL66100WR)</li> <li>- 240" Antenna Cable (CBLRD-1B4002400R)</li> <li>- Standard RFID Antenna Mounting Kit (BRKT-70661-01R)</li> </ul>	
<p>AN440-CPDFQ915WR</p>		<p>AN440 High Performance Area Antenna</p>	<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> <li>▶ Antenna uses Type-N connector</li> </ul>	<p>Two RF Antenna Cables (CBLRD-1B400... or CBLRD-3B400...)</p>

**Antenna Cabling**





(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 FXR 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, AN520 or AN650 antennas to Zebra RFID antenna cables with Type-N connector.</li> <li>▶ Normally included with each AN510 antenna Kit.</li> <li>▶ Cable is IP67 rated.</li> <li>▶ Cable length is approx 14 in.</li> <li>▶ LMR195 cable, Type-N to SMA straight connector.</li> </ul>	
CBLRD-3B4000680R (68"/~5.5 ft. length) CBLRD-3B4001800R (180"/15 ft. length) CBLRD-3B4002400R (240"/20 ft. length) CBLRD-3B4003600R (360"/30 ft. length)		RF Antenna Cable, IP67 sealed, Type-N connector	<ul style="list-style-type: none"> <li>▶ Cable connects RFID antenna to reader.</li> <li>▶ LMR240 cable, RP-TNC to Type-N straight connector</li> </ul>	
CBLRD-1B4000680R (68"/~5.5 ft. length) CBLRD-1B4001800R (180"/15 ft. length) CBLRD-1B4002400R (240"/20 ft. length) CBLRD-1B4003600R (360"/30 ft. length)		RF Antenna Cable	<ul style="list-style-type: none"> <li>▶ Cable connects RFID antenna to reader.</li> <li>▶ LMR240 cable, RP-TNC to Type-N, right angle connector</li> </ul>	
CBLRD-1C4000600R (60"/5 ft. length) CBLRD-1C4001200R (120"/10 ft. length) CBLRD-1C4001800R (180"/15 ft. length) CBLRD-1C4002400R (240"/20 ft. length) CBLRD-1C4003600R (360"/30 ft. length)		RF Antenna Cable, IP67 sealed, SMA connector	<ul style="list-style-type: none"> <li>▶ Cable connects RFID antenna to reader.</li> <li>▶ LMR240 cable, RP-TNC to SMA straight connector</li> <li>▶ Cable typically used to connect AN510, AN520 or AN650 RFID antennas to reader.</li> <li>▶ Not compatible with other RFID antennas.</li> </ul>	





CBL-SP5506-PW56		RF Antenna Cable, SMA connector, White	<ul style="list-style-type: none"> <li>▶ Cable typically used to connect AN510, AN520 or AN650 RFID antennas to reader.</li> <li>▶ Type RG58 cable, SMA Male to RP-TNC</li> <li>▶ 360"/30 ft. length</li> <li>▶ Not compatible with other RFID antennas.</li> </ul>	
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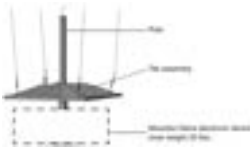

**Antenna Mounting options**

Part Number	Picture	Description	Notes	Required Items
MNT-100100MM-01		Heavy Duty VESA Mount	▶ Can be used to mount AN510 or AN520	
BRKT-70661-01R		Standard RFID Antenna Mounting Kit.		
BRKT-70662-01R		Heavy Duty RFID Antenna Mounting Kit	▶ Has 16" extension arm	
SK5503-SR0000SSWW		Articulating RFID Antenna Mount - AN520 or ST5501	<ul style="list-style-type: none"> <li>▶ Typically used to mount AN520 or ST5501 antennas at various orientations.</li> <li>▶ Mount uses VESA 75 x 75mm and VESA 100 x 100mm hole patterns.</li> <li>▶ Includes screws for attaching AN520 or ST5501 to mount. Also requires additional hardware.</li> </ul>	<ul style="list-style-type: none"> <li>▶ If attaching AN520 antennas: <ul style="list-style-type: none"> <li>- Nuts for Articulating RFID Antenna Mount (SK5503-SR00001SSWW)</li> </ul> </li> <li>▶ If attaching ST5501 antennas: <ul style="list-style-type: none"> <li>- Adapter Plate for Articulating RFID Antenna Mount (ST5501) (BRKT-AN-0000R-00)</li> <li>- Hardware for Articulating RFID Antenna Mount (ST5501) (SK5503-SR00002SSWW)</li> </ul> </li> </ul>

<p>SK5503-SR00001SSWW</p>		<p>Nuts for Articulating RFID Antenna Mount (AN520)</p>	<ul style="list-style-type: none"> <li>▶ Used to secure AN520 antennas to Articulating RFID Antenna Mount (SK5503-SR00000SSWW)</li> <li>▶ Includes 4 M4 Hex Flange nuts</li> </ul>	
<p>SK5503-SR00002SSWW</p>		<p>Hardware for Articulating RFID Antenna Mount (ST5501)</p>	<ul style="list-style-type: none"> <li>▶ Used to secure one ST5501 antenna to Adapter Plate (BRKT-AN-0000R-00) when attaching to Articulating RFID Antenna Mount (SK5503-SR00000SSWW)</li> <li>▶ Includes 4 1/4 20 Hex Flange nuts and 4 spacers</li> </ul>	
<p>BRKT-AN-0000R-00</p>		<p>Adapter Plate for Articulating RFID Antenna Mount (ST5501)</p> 	<ul style="list-style-type: none"> <li>▶ Used to attach one ST5501 antenna to Articulating RFID Antenna Mount (SK5503-SR00000SSWW).</li> <li>▶ Plate attaches to threaded studs on ST5501 antenna and provides 100 x 100 VESA hole pattern used by Articulating Mount.</li> <li>▶ Screws included with Articulating Mount (SK5503-SR00000SSWW) attach to standoffs in the adapter plate.</li> </ul>	
<p>BR-000237-01</p>		<p>Telescopic Adjustable Ceiling Mounting Pole, White (18" to 32")</p> 	<ul style="list-style-type: none"> <li>▶ Pole mounts Overhead POS Antenna (SP5502) to open ceilings - to ceiling channel, strut or truss with one bolt.</li> <li>▶ Pole is adjustable from 18" to 32" (1' 6" to 2' 8") from ceiling.</li> <li>▶ Adjustable Tilt and Swivel</li> <li>▶ Includes safety cable.</li> <li>▶ Includes Leveling Plate for accommodating uneven ceilings</li> <li>▶ Includes VESA 75 &amp; 100 mounting plate, although it is typically not used when mounting the SP5502. The antenna is typically attached directly to the pole.</li> <li>▶ Supports weights up to 35 lb.</li> </ul>	

BR-000238-01		<p>Telescopic Adjustable Ceiling Mounting Pole, Black (18" to 32")</p> 	<ul style="list-style-type: none"> <li>▶ Pole mounts Overhead POS Antenna (SP5502) to open ceilings - to ceiling channel, strut or truss with one bolt.</li> <li>▶ Pole is adjustable from 18" to 32" (1' 6" to 2' 8") from ceiling.</li> <li>▶ Adjustable Tilt and Swivel</li> <li>▶ Includes safety cable.</li> <li>▶ Includes Leveling Plate for accomodating uneven ceilings</li> <li>▶ Includes VESA 75 &amp; 100 mounting plate, although it is typically not used when mounting the SP5502. The antenna is typically attached directly to the pole.</li> <li>▶ Supports weights up to 35 lb.</li> </ul>	
BR-000237-02		<p>Telescopic Adjustable Ceiling Mounting Pole, White (36" to 66")</p> 	<ul style="list-style-type: none"> <li>▶ Pole mounts Overhead POS Antenna (SP5502) to open ceilings - to ceiling channel, strut or truss with one bolt.</li> <li>▶ Pole is adjustable from 36" to 66" (3' to 5' 6") from ceiling.</li> <li>▶ Adjustable Tilt and Swivel</li> <li>▶ Includes safety cable.</li> <li>▶ Includes Leveling Plate for accomodating uneven ceilings</li> <li>▶ Includes VESA 75 &amp; 100 mounting plate, although it is typically not used when mounting the SP5502. The antenna is typically attached directly to the pole.</li> <li>▶ Supports weights up to 35 lb.</li> </ul>	


BR-000238-02		<p>Telescopic Adjustable Ceiling Mounting Pole, Black (36" to 66")</p> 	<ul style="list-style-type: none"> <li>▶ Pole mounts Overhead POS Antenna (SP5502) to open ceilings - to ceiling channel, strut or truss with one bolt.</li> <li>▶ Pole is adjustable from 36" to 66" (3' to 5' 6") from ceiling.</li> <li>▶ Adjustable Tilt and Swivel</li> <li>▶ Includes safety cable.</li> <li>▶ Includes Leveling Plate for accomodating uneven ceilings</li> <li>▶ Includes VESA 75 &amp; 100 mounting plate, although it is typically not used when mounting the SP5502. The antenna is typically attached directly to the pole.</li> <li>▶ Supports weights up to 35 lb.</li> </ul>	
BR-000237-03		<p>Telescopic Adjustable Ceiling Mounting Pole, White (72" to 138")</p> 	<ul style="list-style-type: none"> <li>▶ Pole mounts Overhead POS Antenna (SP5502) to open ceilings - to ceiling channel, strut or truss with one bolt.</li> <li>▶ Pole is adjustable from 72" to 138" (6' to 11' 6") from ceiling.</li> <li>▶ Adjustable Tilt and Swivel</li> <li>▶ Includes safety cable.</li> <li>▶ Includes Leveling Plate for accomodating uneven ceilings</li> <li>▶ Includes VESA 75 &amp; 100 mounting plate, although it is typically not used when mounting the SP5502. The antenna is typically attached directly to the pole.</li> <li>▶ Supports weights up to 35 lb.</li> </ul>	

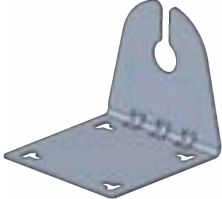
BR-000238-03		<p>Telescopic Adjustable Ceiling Mounting Pole, Black (72" to 138")</p> 	<ul style="list-style-type: none"> <li>▶ Pole mounts Overhead POS Antenna (SP5502) to open ceilings - to ceiling channel, strut or truss with one bolt.</li> <li>▶ Pole is adjustable from 72" to 138" (6 to 11' 6") from ceiling.</li> <li>▶ Adjustable Tilt and Swivel</li> <li>▶ Includes safety cable.</li> <li>▶ Includes Leveling Plate for accomodating uneven ceilings</li> <li>▶ Includes VESA 75 &amp; 100 mounting plate, although it is typically not used when mounting the SP5502. The antenna is typically attached directly to the pole.</li> <li>▶ Supports weights up to 35 lb.</li> </ul>	
SK5501-SR1000SSWW		<p>Mounting Kit for Drop Ceilings</p>	<ul style="list-style-type: none"> <li>▶ Allows Overhead POS Antenna (SP5502) to be hung from drop ceilings.</li> <li>▶ Kit includes the following: <ul style="list-style-type: none"> <li>- 2 ft x 2 ft metal tile (1)</li> <li>- Spool of galvanized wire (1)</li> <li>- Safety clips (2)</li> <li>- Turnbuckles (4)</li> <li>- 1-11/16" ID collar (1)</li> <li>- #10-24 x 2-3/4" pan head screw (1)</li> <li>- #10 flat washers (6)</li> <li>- #10-24 locknut (1)</li> <li>- Plastic shims (2)</li> <li>- Security cable (1) and cable clamp (1)</li> </ul> </li> </ul>	<p>Mounting Pole for Drop Ceilings (HN-001083-xx)</p>
<p>HN-001083-01 (1 ft. length)</p> <p>HN-001083-02 (2 ft. length)</p> <p>HN-001083-04 (4 ft. length)</p> <p>HN-001083-06 (6 ft. length)</p> <p>HN-001083-08 (8 ft. length)</p> <p>HN-001083-10 (10 ft. length)</p>		<p>Mounting Pole for Drop Ceiling</p>	<ul style="list-style-type: none"> <li>▶ Used to mount Overhead POS Antenna (SP5502) to drop ceilings</li> </ul>	<p>Mounting Kit for Drop Ceilings (SK5501-SR1000SSWW)</p>
<b>Reader Mounting Hardware and Accessories</b>				
Part Number	Picture	Description	Notes	Required Items





MNT-100100MM-01		Heavy Duty VESA Mount	<ul style="list-style-type: none"> <li>▶ Bracket allows the FXR90 to be mounted on walls or poles.</li> <li>▶ Uses 100 x 100mm VESA hole pattern</li> </ul>	▶ Heavy Duty Adapter Plate (ADP-200100MM-01)
ADP-200100MM-01		Heavy Duty Adaptor Plate	<ul style="list-style-type: none"> <li>▶ Attaches to back of FXR90.</li> <li>▶ Converts the FXR90's 200mm x 100mm hole pattern to 100 x 100mm VESA pattern.</li> <li>▶ Use screws from the flush mount bracket included with FXR90 to attach the adapter plate to the reader.</li> </ul>	

**Wireless Communication Antennas**

Part Number	Picture	Description	Notes	Required Items
ANT-WLANIP0-90SMA		Indoor WiFi or Bluetooth Antenna	<ul style="list-style-type: none"> <li>▶ This is an optional antenna to provide expanded coverage vs. the FXR90's built-in WiFi/Bluetooth antenna.</li> <li>▶ Provides WiFi or Bluetooth coverage in indoor environments.</li> <li>▶ Antenna can be articulated.</li> <li>▶ Connect to WLAN port on FXR90 for WiFi coverage or Bluetooth port on FXR90 for Bluetooth coverage.</li> </ul>	
ANT-WLANIP6-90SMA		Outdoor WiFi or Bluetooth Antenna	<ul style="list-style-type: none"> <li>▶ This is an optional antenna to provide expanded coverage vs. the FXR90's built-in WiFi/Bluetooth antenna.</li> <li>▶ Provides WiFi or Bluetooth coverage in outdoor environments.</li> <li>▶ IP67 sealed.</li> <li>▶ Antenna can be articulated.</li> <li>▶ Connect to WLAN port on FXR90 for WiFi coverage or Bluetooth port on FXR90 for Bluetooth coverage.</li> </ul>	
ANT-4G5GGPS010-SMA		Cellular & GPS Antenna	<ul style="list-style-type: none"> <li>▶ This is a required antenna to provide cellular or GPS capabilities as the FXR90 does not include a built-in antenna.</li> <li>▶ 4G/5G/GPS antenna,</li> <li>▶ 1M (3 ft.) cable length</li> <li>▶ 4x SMA Male Connectors</li> <li>▶ Black color</li> <li>▶ Can be mounted using Cellular &amp; GPS Antenna Mounting Bracket (BRKT-000373-01)</li> </ul>	


BRKT-000373-01		Cellular & GPS Antenna Mounting Bracket	▶ Allows Cellular & GPS Antenna (ANT-4G5GGPS010-SMA) to be mounted.	
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**GPIO devices**

Part Number	Picture	Description	Notes	Required Items
Q20 series (3rd party) *  <a href="http://www.bannerengineering.com/">http://www.bannerengineering.com/</a>		Photo Eye		
PREF-301-RYG (3rd party) *  <a href="http://www.menics.co.kr/en/">http://www.menics.co.kr/en/</a>		Light Stack		

**Power Cords/Power Supplies**

**AC Power options**  
NOTE: When powered via AC power FXR90 provides 24V 1A max for auxillary GPIO devices (i.e. alarms, light stacks, etc.)

Part Number	Picture	Description	Notes	Required Items
PWR-BGA24V78W3WW		AC to DC Power Supply	<ul style="list-style-type: none"> <li>▶ 24V, 3.25A, 78W</li> <li>▶ Operating temperature: -20C to +55C</li> <li>▶ Unsealed, for use in indoor locations.</li> </ul>	▶ AC Line Cord (23844-00-00F or country specific version)

PWR-BGA24V90W0WW		AC to DC Power Supply, IP67 sealed	<ul style="list-style-type: none"> <li>▶ 24V, 3.75A, 90W</li> <li>▶ Operating temperature: -40C to +65C</li> <li>▶ IP67 sealed</li> <li>▶ Can be mounted in various orientations.</li> </ul>	<p><u>DC Cord</u></p> <ul style="list-style-type: none"> <li>▶ DC Line Cord for IP67 Power Supplies (CBL-PWRD035-M12M12 or CBL-PWRD100-M12M12)</li> </ul> <p><u>AC Cord option #1</u></p> <ul style="list-style-type: none"> <li>▶ AC Line Cord IEC Adapter Cable (CBL-PWRA035-M12IEC)</li> <li>▶ AC Line Cord (23844-00-00R or country specific version)</li> <li>- or -</li> </ul> <p><u>AC Cord option #2</u></p> <ul style="list-style-type: none"> <li>▶ AC Line Cord, flying leads (CBL-PWRA150-M1200)</li> </ul>
CBL-PWRD035-M12M12 (3.5M , 11.5 ft. length) CBL-PWRD100-M12M12 (10M, 33 ft. length)		DC Line Cord for IP67 Power Supplies	<ul style="list-style-type: none"> <li>▶ Used to power FXR90 from Power Supply PWR-BGA24V90W0WW or PWR-BGA24V90W1WW.</li> <li>▶ Connect to DC Out connector on power supply.</li> <li>▶ M12 to M12 connector</li> </ul>	
CBL-PWRA035-M12IEC		AC Line Cord IEC Adapter Cable for IP67 Power Supply	<ul style="list-style-type: none"> <li>▶ Used along with grounded AC Line Cord (23844-00-00R or similar) to power IP67 AC Power Supply (PWR-BGA24V90W1WW).</li> <li>▶ M12 A-coded to IEC connector</li> <li>▶ Connect to AC In connector on power supply.</li> <li>▶ Cable length is 3.5M (11.5 ft.)</li> </ul>	
23844-00-00R		AC Line Cord	<ul style="list-style-type: none"> <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>	
CBL-PWRA150-M1200		AC Line Cord, flying leads	<ul style="list-style-type: none"> <li>▶ Used to power FXR90 from Power Supply PWR-BGA24V90W0WW.</li> <li>▶ This AC Line Cord connects to the corresponding wire phase on the AC power system.</li> <li>▶ Connect to AC In connector on power supply.</li> <li>▶ Flying leads to M12 connector</li> <li>▶ Cable length is 15M, 49 ft.</li> </ul>	






**DC Power options**

**NOTE:**

When powered via 24V DC power FXR90 provides 24V 1A max for auxillary GPIO devices (i.e. alarms, light stacks, etc.)

When powered via 12V DC power FXR90 provides 12V 250mA max for auxillary GPIO devices (i.e. alarms, light stacks, etc.)

Part Number	Picture	Description	Notes	Required Items
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PWR-BGA24V90W1WW		DC to DC Power Supply, IP67 sealed	<ul style="list-style-type: none"> <li>▶ Supports 9-60V 17.2A DC input</li> <li>▶ 24V, 3.75A, 90W DC output</li> <li>▶ Operating temperature: -40C to +65C</li> <li>▶ IP67 sealed</li> <li>▶ Can be mounted in various orientations.</li> </ul>	<ul style="list-style-type: none"> <li>▶ DC Line Cord for IP67 Power Supplies (CBL-PWRD035-M12M12 or CBL-PWRD100-M12M12)</li> <li>▶ DC Line Cord, flying leads (CBL-PWRD150-M12M00)</li> </ul>
CBL-PWRD035-M12M12 (3.5M , 11.5 ft. length) CBL-PWRD100-M12M12 (10M, 33 ft. length)		DC Line Cord for IP67 Power Supplies	<ul style="list-style-type: none"> <li>▶ Used to power FXR90 from Power Supply PWR-BGA24V90W0WW or PWR-BGA24V90W1WW.</li> <li>▶ Connect to DC Out connector on power supply.</li> <li>▶ M12 to M12 connector</li> </ul>	
CBL-PWRD150-M12M00		DC Line Cord, flying leads	<ul style="list-style-type: none"> <li>▶ This DC Line Cord connects the DC to DC Power Supply (PWR-BGA24V90W1WW) to the 9-60V DC power system.</li> <li>▶ Connect to DC In connector on power supply.</li> <li>▶ Flying leads to M12 connector</li> <li>▶ Cable length is 15M, 49 ft.</li> </ul>	
CBL-PWRD035-M1200 (3.5M , 11.5 ft. length) CBL-PWRD100-M1200 (10M, 33 ft. length)		Direct Wire DC Power Cable, flying leads	<ul style="list-style-type: none"> <li>▶ Used to power FXR90 from 12-24V DC power systems.</li> <li>▶ Does not require additional power supplies.</li> <li>▶ Flying leads to M12 connector.</li> </ul>	
CBL-PWRD035-M12CL		Direct Wire DC Power Cable, cigarette lighter adapter	<ul style="list-style-type: none"> <li>▶ Used to power FXR90 from 12-24V DC power systems.</li> <li>▶ Does not require additional power supplies.</li> <li>▶ Cable length is 3.5M, 11.5 ft.</li> <li>▶ Cigarette lighter adapter to M12 connector.</li> </ul>	

**Power Over Ethernet (POE) Power options**

**NOTE:**

When powered via 802.3af (POE) FXR90 does not provide power to auxillary GPIO devices (i.e. alarms, light stacks, etc.)

When powered via 802.3at (POE+) FXR90 provides 24V 250mA max for auxillary GPIO devices (i.e. alarms, light stacks, etc.)

<p>CBL-ENT00101-M1200 (1M, 3 ft. length)</p> <p>CBL-ENT00301-M1200 (3M, 10 ft. length)</p> <p>CBL-ENT00501-M1200 (5M, 16 ft. length)</p> <p>CBL-ENT01501-M1200 (15M, 49 ft. length)</p>		<p>Ethernet Cable</p>	<ul style="list-style-type: none"> <li>▶ X-Coded M12 to RJ45 connectors</li> <li>▶ CAT6 cable supports POE+ for powering the FXR90.</li> </ul> 	
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