



FXR90 Ultra-Rugged Fixed RFID Reader, UHF RFID, Bluetooth 5.3, Wi-Fi 6, Reader Only, 4 External Antenna Ports, 800MHz & 900MHz

Maximize asset tracking capabilities in the harshest environments with the Zebra FXR90 Ultra-Rugged Fixed RFID readers. Engineered with industrialgrade IP sealing and an expanded operating temperature range, it's built to perform reliably anywhere, even in industrial and outdoor settings.

Keep your supply chain moving and track your assets and inventory even in extreme weather with the versatile, easy-to-use Zebra FXR90 Ultra-Rugged Fixed RFID readers. Designed to be easily deployed in the toughest conditions, FXR90 RFID readers are built to perform reliably in a wide range of harsh environments—both indoors and outside.



With a ruggedized design and robust, industry-leading performance, such as read rates of 1,300+ tags per second, FXR90 RFID readers enable greater visibility and real-time data wherever you need it most. The dual IP65/67 sealing and extended operating temperature range allow workers to track critical items even where dirt and moisture infiltration or extreme temperatures are common. That's because the FXR90 and all of its connectors are fully sealed, allowing you to place it in brutal conditions where it can withstand repeated washdowns.

Key features:

- Extended operating temperature range for use in refrigeration chains (-40°C to 65°C)
- Higher reading speed up to 1,300 tags per second
- Easy network connectivity through Wi-Fi 6
- Wireless connection of mobile devices to the reader via Bluetooth
- IoT connector for data provision using modern, secure protocols
- Versatile power options
- Flexible mounting options for various environments
- IP65/IP67 rating, including sealed M12 connectors
- Easy management and configuration



















Technical Description

Functionality & Operation

Antennas, Antenna inputs 4 External RP-TNC Antenna Ports Frequency EU: UHF 865-868 MHz; 0-33 dBm (ERP), 916.3, 917.5, and 918.7 MHz; 0-36 dBm (ERP) Indicators Ethernet, GPIO , 2x USB Connectors M12 Maximal transmit power 33dBm WLAN Features 33dBm WLAN Features (EBE 802.11ax/ac/a/b/g/n 2X2, MU-MIMO/IPv4 WPAN Features Class 1, Bluetooth v.S.3 with BLE Operating system Linux Memory 26B LP DDR4 RAM Expansion slot eMMC Flash Expansion slot MXP MIX Mini Quad Cortex-AS3 RFID transponder protocols ISO 18000-6C (EPC Class 1 GBu-2V2) Data memory 16G8 eMMC Flash Wireless communication Bluetoothe, N.F.C WIFI 6 Power Source 1800 / See Electrica Power Source Development of Source (EPC Class 1 GBu-2V2) Memory 16G8 eMMC Flash Wireless communication Bluetoothe, N.F.C WIFI 6 Detection Detection Electrica Electrica Weethanica Weethanica Body / See Source Source (EPC 2 See Supply 2 Zebra DC/DC (Prof. Sealed Power Supply, Zebra AC/DC (Prof. Sealed Power Supply,	Functionality & Operation	
LED Communication interface Ethernet, GPIO, 2x USB Connectors M12 Maximal transmit power 33dBm WLAN Features IEEE 802.11 at/ac/a/b/g/n 2X2, MU-MIMO,IPv4 WPAN Features Class 1, Bluetooth v5.3 with BLE Operating system Linux Memory 2GB LP DDR4 RAM Expansion slot eMMC Flash CPU Type NXP IMX8 Mini Quad Cortex A53 RFID transponder protocols ISO 18000-6C (FPC Class 1 Gen2V2) Data memory 16GB eMMC Flash Wireless communication Bluetooth v8, NFC, WIFI 6 Optical Scanning rate 1300 / sec Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power Supply, Zebra DC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power Supply, Zebra DC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power Supply, Zebra DC/DC IP67 Sealed Power Supply, Zebra AC/DC IP60 Sealed Power	Antennas, Antenna inputs	4 External RP-TNC Antenna Ports
Communication interface Ethernet, GPIO, 2x USB Connectors M12 Maximal transmit power 33dBm WLAN Features IEEE 802.11ax/ac/a/b/g/n 2X2, MU-MIMO/IPv4 WPAN Features Class 1, Bluetooth v5.3 with BLE Operating system Linux Memory 2GB LP DDR4 RAM Expansion slot eMMC Flash CPU Type NXP IMX8 Mini Quad Cortex-A53 RFID transponder protocols ISO 18000-6C (EPC Class 1 Gen2V2) Data memory 1GGB eMMC Flash Wireless communication Bluetoothe, NFC, WIFI 6 Optical Scanning rate 1300 / sec Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC 1PG7 Sealed Power Supply, Zebra AC/DC Indoor Sealed Power Supply, Power-over-Ethernet+ Injector (802.3af) Power-	Frequency	EU: UHF 865–868 MHz; 0–33 dBm (ERP), 916.3, 917.5, and 918.7 MHz; 0–36 dBm(ERP)
Connectors M12 Maximal transmit power 33dBm WLAN Features IEEE 802.11ax/ac/ar/b/g/n 2X2, MU-MIMO,IPv4 WPAN Features Class 1, Bluetooth v5.3 with BLE Operating system Linux Memory 2GB LP DDR4 RAM Expansion slot eMMC Flash CPU Type NXP IMX8 Mini Quad Cortex-A53 RFID transponder protocols ISO 18000-6C (EPC Class 1 Gen2V2) Data memory 16GB eMMC Flash Wireless communication Bluetooth®, NFC, WiFi 6 Optical Sanning rate 300 / sec Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor over-Ethernet Injector (802.3at) Power-Ethernet Injector (802.3at) Mechanical Color black Body housing Diceast Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes) Dimensions Width: 29.1cm, Height: 5.2cm Length: 25.4cm Britonnent Linux	Indicators	LED
Maximal transmit power 333Bm WLAN Features 1EEE 802.11ax/ac/a/b/g/n 2X2, MU-MIMO,IPv4 WPAN Features Class 1, Bluetooth v5.3 with BLE Operating system Linux Memory 2GB LP DDR4 RAM Expansion slot eMMC Flash CPU Type NXP iMX8 Mini Quad Cortex-A53 RFID transponder protocols 150 18000-6C (EPC Class 1 Gen2V2) Data memory 166B eMMC Flash Wireless communication Bluetooth®, NFC, WiFi 6 Optical Scanning rate 1300 / sec Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor over-Ethernet+ Injector (802.3at), Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet-Injector (802.3at), Power-over-Etherne	Communication interface	Ethernet, GPIO , 2x USB
MIAN Features IEEE 802.11ax/ac/a/b/g/n 2X2, MU-MIMQ,IPv4 WPAN Features Class 1, Bluetooth v5.3 with BLE Operating system Linux Memory 2GB LP DDR4 RAM Expansion slot eMMC Flash CPU Type NXP IMX8 Mini Quad Cortex-A53 RFID transponder protocols ISO 18000-6C (EPC Class 1 Gen2V2) Data memory 16GB eMMC Flash Wireless communication Bluetooth®, NFC, WiFi 6 Optical Scanning rate 1300 / sec Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power-Ethernet injector (802.3af) Mechanical Color Black Body housing Directs Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes) Dimensions Width: 29.1cm, Height: 5.2cm Length: 25.4cm Evertorement Evertorement Evertorement Weight School Schoo	Connectors	M12
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Deprating system bilance Memory 2GB LP DDR4 RAM Expansion slot eMMC Flash CPU Type NXP IMX8 Mini Quad Cortex-A53 RFID transponder protocols ISO 18000-6C (EPC Class 1 Gen2V2) Data memory 16GB eMMC Flash Wireless communication Bluetooth®, NFC, WIFI 6 Optical Scanning rate 1300 / sec Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power Supply, Zebra DC/DC IP67 Sealed Power Supply, Power-over-Ethrenet Injector (802.3af) owner Supply, Zebra AC/DC Indoor Power Supply, Zebra AC	WLAN Features	IEEE 802.11ax/ac/a/b/g/n 2X2, MU-MIMO,IPv4
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Expansion slot eMMC Flash CPU Type NXP iMX8 Mini Quad Cortex-A53 RFID transponder protocols ISO 18000-6C (EPC Class 1 Gen2V2) Data memory 16GB eMMC Flash Wireless communication Bluetooth®, NFC, WiFi 6 Optical Scanning rate 1300 / sec Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power Supply, Zebra DC/DC IP67 Sealed Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet Injector (802.3at), Power-over-Ethernet Injector (802.3at), Power-over-Ethernet Injector (802.3at) Body housing Diecast Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes) Dimensions Width: 29.1cm, Height: 5.2cm Length: 25.4cm Weight 2.5kg	Operating system	Linux
CPU Type NXP iMX8 Mini Quad Cortex-A53 RFID transponder protocols ISO 18000-6C (EPC Class 1 Gen2V2) Data memory 16GB eMMC Flash Wireless communication Bluetooth®, NFC, WiFi 6 Optical Scanning rate 1300 / sec Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power-Ethernet Injector (802.3af) Mechanical Color Black Body housing Diecast Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes) Dimensions Width: 29.1 cm, Height: 5.2 cm Length: 25.4 cm Weight Environment NAP i MXP i MX8 Mini Quad Cortex-A53 ISO 18000-6C (EPC Class 1 Gen2V2) Iso 18000-6C (EPC Class	Memory	2GB LP DDR4 RAM
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Data memory 16GB eMMC Flash Wireless communication Bluetooth®, NFC, WiFi 6 Optical Scanning rate 1300 / sec Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power Supply, Zebra DC/DC IP67 Sealed Power Supply, Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet Injector (802.3af) Mechanical Color black Body housing Diecast Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes) Dimensions Width: 29.1cm, Height: 5.2cm Length: 25.4cm Weight 2.5kg Environment	CPU Type	NXP iMX8 Mini Quad Cortex-A53
Wireless communication Bluetooth®, NFC, WiFi 6 Optical Scanning rate 1300 / sec Electrical Power Source Power Supply, Zebra DC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power Supply, Zebra DC/DC IP67 Sealed Power Supply, Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet Injector (802.3af) Mechanical Color black Body housing Diecast Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes) Dimensions Width: 29.1cm, Height: 5.2cm Length: 25.4cm Weight 2.5kg Environment	RFID transponder protocols	ISO 18000-6C (EPC Class 1 Gen2V2)
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Electrical Power Source Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power Supply, Zebra DC/DC IP67 Sealed Power Supply, Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet Injector (802.3af) Mechanical Color black Body housing Diecast Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes) Dimensions Width: 29.1cm, Height: 5.2cm Length: 25.4cm Weight 2.5kg Environment	Optical	
Direct 12 VDC to 24 VDC via flying leads, Zebra AC/DC IP67 Sealed Power Supply, Zebra AC/DC Indoor Power Supply, Zebra DC/DC IP67 Sealed Power Supply, Power-over-Ethernet+ Injector (802.3at), Power-over-Ethernet Injector (802.3af) Mechanical Color black Body housing Diecast Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes) Dimensions Width: 29.1cm, Height: 5.2cm Length: 25.4cm Weight 2.5kg Environment	Scanning rate	1300 / sec
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Body housing Diecast Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes) Dimensions Width: 29.1cm, Height: 5.2cm Length: 25.4cm Weight 2.5kg Environment	Mechanical	
Dimensions Width: 29.1cm, Height: 5.2cm Length: 25.4cm Weight 2.5kg Environment	Color	black
Weight 2.5kg Environment	Body housing	Diecast Aluminum (Reader Body), Polycarbonate/Polybutylene Terephthalate Blend (Antenna Radomes)
Environment	Dimensions	Width: 29.1cm, Height: 5.2cm Length: 25.4cm
	Weight	2.5kg
Vibrations resistance MIL-STD-810 Method 514, Procedure I	Environment	
	Vibrations resistance	MIL-STD-810 Method 514, Procedure I
Operating temperature -40 to 65°C	Operating temperature	-40 to 65°C

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