

X82

Fixed RAIN RFID Reader

THE TOP RANKED COST PERFORMANCE RATIO READER

The X82 is cost effective, compact-sized, and high-performance RAIN RFID readers best suited for manufacturing, retail, and warehouse/logistic application; available in 4-port (X82-L4) and 8-port (X82-L8) configuration.

It comes with embedded Linux OS making it easily configurable using an internal web interface. With support for PoE+, 4x USB, and plenty GPIO, the X82 offer users the flexibility to install app to control all RFID features and interfaces for a full reader customization. Long range reading is easily achievable with a maximum power of 33 dBm. Its compact and slim design makes it easy to install in limited spaces.



The USB host/device ports allow the connection of USB peripherals, such as barcode scanners, keyboards, printers and many others, transforming the X82 reader into a powerful and versatile data capture and identification platform. The reader also supports Wi-Fi/Bluetooth USB dongle for direct wireless connectivity to Wi-Fi network, as well as Bluetooth-enabled computers and other devices, eliminating the need for hard-wired connections to the access point.

An optional 4G LTE with GPS dongle enables users to extend RFID to the field. For example, it can be installed in a delivery truck to automatically verify package pick-up and delivery. The integrated GPS provides the exact location where RFID tags are read, giving users complete visibility into when and where a package or asset is placed or received.

X82 SPECIFICATIONS

RFID CHARACTERISTICS

RF Engine	XEMA M87P4/8 module with Impinj E710 die inside
Air Protocols	ISO 18000-63 (EPC Class1 Gen2 v2)
Frequency Range	902-928 MHz (FCC Part 15.247) 865-868 MHz (ETSI EN 302 208) Japan, Taiwan, and other worldwide regions
RF Power Output	Up to 33 dBm
Port Switching Time	< 10 ms
RX Sensitivity	< -83 dBm
Fastest Read Rate	Up to 1300 tags/s
Number of Channels	FCC: 50 hopping channels ETSI: 4 channels
DRM Mode	Supported

CONNECTIVITY

Communications	10/100 Base T Ethernet (RJ45) 1x USB Host/Client (Type C) 1x USB VCP (Type A) 2x USB Client (Type C & Type A)
General Purpose I/O	24 positions spring clamp terminal blocks: 4x digital input, optically isolated, 4~60VDC 2x relay, 250VAC/220VDC, 62.5VA/60W max 2x programmable output, 12VDC/500mA max 1x continuous output, 5VDC/500mA max 1x reboot/reset input 1x trigger input
Power Supply	PoE+ (802.3at), 30W 12VDC 3A
Antenna Connector	X82-L4: 4 ports, RP-TNC, monostatic X82-L8: 8 ports, RP-TNC, monostatic

ORDERING INFORMATION

P/N	Description
X82-L4TR-USNNB	4-Port, Fixed RAIN RFID Reader, RP-TNC, FCC
X82-L4TR-EUNNB	4-Port, Fixed RAIN RFID Reader, RP-TNC, ETSI
X82-L4TR-JPNNB	4-Port, Fixed RAIN RFID Reader, RP-TNC, MTI
X82-L4TR-TWNNB	4-Port, Fixed RAIN RFID Reader, RP-TNC, NCC
X82-L8TR-USNNB	8-Port, Fixed RAIN RFID Reader, RP-TNC, FCC
X82-L8TR-EUNNB	8-Port, Fixed RAIN RFID Reader, RP-TNC, ETSI
X82-L8TR-JPNNB	8-Port, Fixed RAIN RFID Reader, RP-TNC, MTI
X82-L8TR-TWNNB	8-Port, Fixed RAIN RFID Reader, RP-TNC, NCC

HARDWARE AND OPERATION SYSTEM

Processor	Microchip SAM9X60 (600 MHz)
Memory	Flash 4 GB, DRAM 1 GB
Operating System	Linux
Firmware Upgrade	Web based remote upgrade
Network Services	DHCP, TCP, HTTPS, SSH, HTTP, NTP
API Support	Host Application – .NET Embedded Application – C & Java

PHYSICAL & ENVIRONMENTAL CHARACTERISTIC

Dimensions	X82-L4: 140 L x 121 W x 30 H (mm) 5.51 L x 4.76 W x 1.18 H (in) X82-L8: 170 L x 121 W x 30 H (mm) 6.69 L x 4.76 W x 1.18 H (in)
Weight	X82-L4: 380 gr / 13.4 oz X82-L8: 420 gr / 14.8 oz
Housing Material	Aluminum
Visual Indicators	4-Multicolor LEDs: Power, Read, Error, Status X82-L4: 4x antenna port activity LEDs X82-L8: 8x antenna port activity LEDs
Operating Temp.	-20°C to 55°C / -4°F to 131°F
Storage Temp.	-40°C to 70°C / -40°F to 158°F
Humidity	5%-95% non-condensing
IP Rating	IP40

