

X80

Portable RAIN RFID/Barcode Reader

ONE DEVICE, ENDLESS POSSIBILITIES

The X80 is a high-performance portable RFID/barcode reader engineered with Xema M87P1 module (Impinj E710 inside) for long-range reading distance, allowing users to read or write data to RFID tags without the need for direct line-of-sight scanning. It supports standard-range and long-range barcode scanning functionality, further enhancing its versatility for inventory management and asset tracking in environments such as warehouses, logistic, retail stores, manufacturing and more. It is compact and durable, with an ergonomic design that provides a comfortable grip, making it easy to use for extended periods.



X80 is compatible with iOS/Android smartphones/tablets as well as Linux/Windows PCs, offering a variety of options for users. Mobile devices can be easily slid on using our sleds and used independently when detached from the X80. Additionally, it is equipped with optional built-in Wi-Fi, Bluetooth, and USB connectivity, allowing for seamless integration with back-end systems for real-time data transfer.

By automating data collection, the X80 reduces manual work and minimizes errors. Its fast read rate accelerates processes such as inventory audits, asset tracking, and logistics—improving accuracy and efficiency with just the press of a button.

With high capacity and swappable batteries, the X80 can operate continuously 24/7, ensuring reliability throughout entire work shifts. The optional docking charger allows users to charge the X80, the attached iOS/Android device, and two additional batteries simultaneously.

The X80 also includes an SDK for effortless integration into iOS and Android applications. In addition, its built-in Linux operating system supports C and Java development, allowing businesses to customize the device's interface and functionality to meet specific operational needs.



Image: X80 with iPhone 16e, docking charger and batteries (iPhone, charger, and extra batteries are sold separately)

SPECIFICATIONS

RFID CHARACTERISTICS

RF Engine	XEMA M87P1 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
RX Sensitivity	< -83 dBm
Fastest Read Rate	> 1300 tags/s
Nominal Read Range	~8 m (~26.2 ft.)
Number of Channels	FCC: 50 hopping channels ETSI: 4 channels

BARCODE SPECIFICATIONS

Sensor Resolution	1280 x 800 pixels global shutter
Aimer	Cross target red laser
Illumination	White LED
Number of Scan	>50,000 scans/charge
Symbology	Reading Distance mm [in]
13 mil UPC	573 [22.5]
5 mil Code 39	301 [11.9]
10 mil Code 39	517 [20.3]
20 mil Code 39	800 [31.5]
15 mil Code 128	650 [25.6]
6.7 mil PDF 417	244 [9.6]
10 mil Data Matrix	297 [11.7]
15 mil QR	414 [16.3]

COMMUNICATION & SUPPORTED OS/DEVICE

Supported OS	iOS, Android, Linux, Windows
Interface	USB Type-C, WiFi, and Bluetooth
Supported Device	iPhone 17e, 16e, 15 Google Pixel 10a, 9a, 7a, 7 Xema branded mobile computer. *Please contact us for more supported devices.

PHYSICAL & ENVIRONMENTAL CHARACTERISTICS

Dimensions	140 H x 78 W x 168 L (mm) 5.5 H x 3.1 W x 6.6 L (in)
Weight	430 gr / 15.2 oz with battery
Battery	Li-ion 5,000 mAh, removable
Indicators	4-Multicolor LEDs: Power, Mode, BT, and Wifi RFID read LED/beeper Barcode decode LED/beeper Low battery status LED
Operating Temp.	-20°C to 60°C/-4°F to 140°F
Storage Temp.	-40°C to 70°C/-40°F to 158°F
Humidity	5%-85% non-condensing
IP Rating	IP65

ACCESSORIES (included with purchase)

Standard Accessories	Type-C cable & wrist strap
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COUNTRY OF ORIGIN

Made in Taiwan or USA

ORDERING INFORMATION

X80 - AAA B - CC D

AAA	OS/Device	B	Barcode Range	CC	Country/Region	D	Configuration
16E	iOS, iPhone 17e, 16e, 15	S	Standard Range (H67SR)	US	USA	N	Standard
P9A	Android, Pixel 10a, 9a, 7a, 7	M	Medium Range, 5m (H68MR)	EU	EU	W	White
E61	Android, Xema E61	L	Long Range, 10m (H68LR)	JP	Japan		
LXW	Linux with Wifi/BT	N	N/A, No Barcode	TW	Taiwan		

Example: X80-16ES-USN is RAIN RFID Reader for iPhone 16e with standard range 2D barcode scanner for USA.

ACCESSORIES (sold separately)

P/N	Description
A10-X80P	Docking Charger for X80 w/ 2-Pack A20-CP50
A10-X80S	Docking Charger for X80
A20-CP50	Battery Pack, 3.6V 5000 mAh