

MODEL X85
UHF RFID Reader

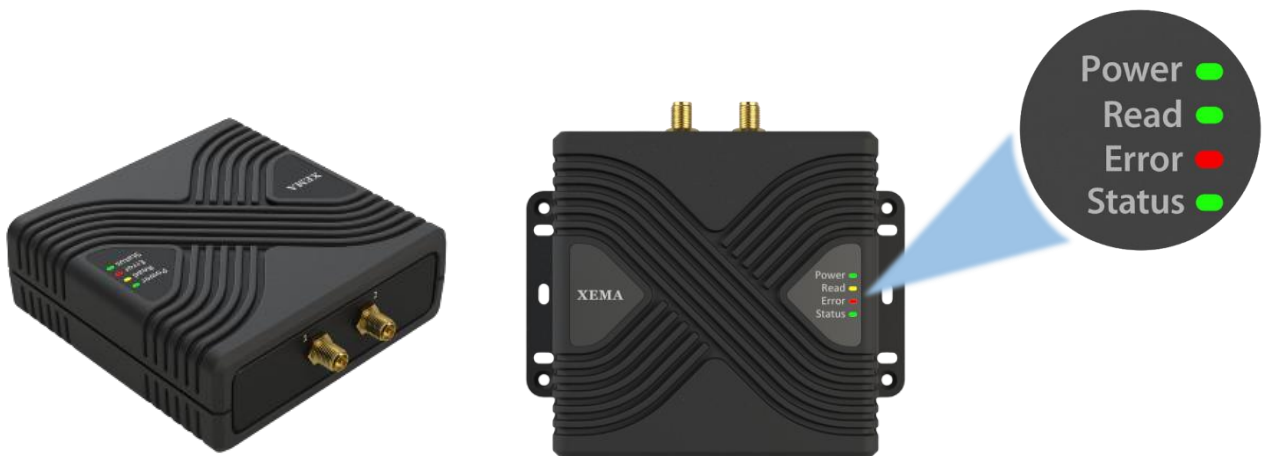
RELIABLE RFID IN A POCKET-SIZED DESIGN

Powered by the Xema module with Impinj E310 or E710, the reader offers robust RF performance with output power up to 28 or 33 dBm to choose from and can be powered via PoE or a widely available USB Type-C PD 3.0 adapter. Featuring GPIO with two optically isolated inputs and two relays. Available in 2-port and 4-port configurations to provide flexible deployment options.



The die-cast aluminum enclosure provides durability and efficient thermal dissipation, and IP65 protection, ensuring stable and reliable high performance even during continuous operation in demanding environments. The front panel includes four LED indicators that clearly display the reader's status.

This compact reader with horizontal/vertical mounting options, is an ideal solution for space-constrained applications such as kiosks, vending machines, smart shelves/lockers, truck, forklift, and more. It is a versatile RFID reader suited for retail, logistics, transportation, and applications, including inventory management, asset tracking, and warehouse operations.



SPECIFICATIONS

RFID CHARACTERISTICS

RF Engine	XEMA RFID module with Impinj E310/E710
Air Protocols	ISO 18000-63 (EPC Class1 Gen2 v2)
Frequency Range & Certification	902~928 MHz, USA/FCC 14 CFR 15.247/107/109 865~868 MHz, EU/ETSI EN 302 208 916~921 MHz, Japan/Giteki 2-1-6-2 922~928 MHz, Taiwan/NCC LP0002 and other worldwide regions
RF Power Output	Up to 28 dBm or 33 dBm
Port Switching Time	<10 ms
RX Sensitivity	M3 <-70 dBm, M7 <-83 dBm
Fastest Read Rate	M3 >300 tags/s, M7 >1000 tags/s
DRM Mode	Supported (M7)

CONNECTIVITY

Communications	10/100 Base-T Ethernet (RJ45) 1x USB Host (Type-C)
General Purpose I/O	12 positions spring clamp terminal block: 2x digital input, optically isolated, 4~60VDC 2x relay, 250VAC/220VDC, 62.5VA/60W max 1x reboot/reset input 1x trigger input
Power Supply	PoE (802.3af), 15W Type-C PD 3.0
Antenna Connector	2/4 ports, RP-SMA, monostatic

PHYSICAL & ENVIRONMENTAL CHARACTERISTIC

Dimensions	100 L x 90 W x 32 H (mm) 3.94 L x 3.54 W x 1.26 H (in)
Weight	240~260 gr / 8.47~9.17 oz
Housing Material	Aluminum Die Cast and PC/ABS
Visual Indicators	Multicolor LEDs: Power, Read, Error, Status, and antenna port activity
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	IP65

COUNTRY OF ORIGIN

Made in Taiwan

ORDERING INFORMATION



AA	Module & Power
M3	M83Pn, 28 dBm Max
M7	M87P4, 33 dBm Max

BB	Connectors
2S	2-Port, RP-SMA
4S	4-Port, RP-SMA

CC	Country/Region
US	USA
EU	EU
JP	Japan
TW	Taiwan

D	Color
B	Black
W	White

Example: X85-M74S-USN is 33 dBm 4-portUHF RFID reader with RP-SMA connectors for USA market.