

X85

Fixed RAIN 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. It is 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.

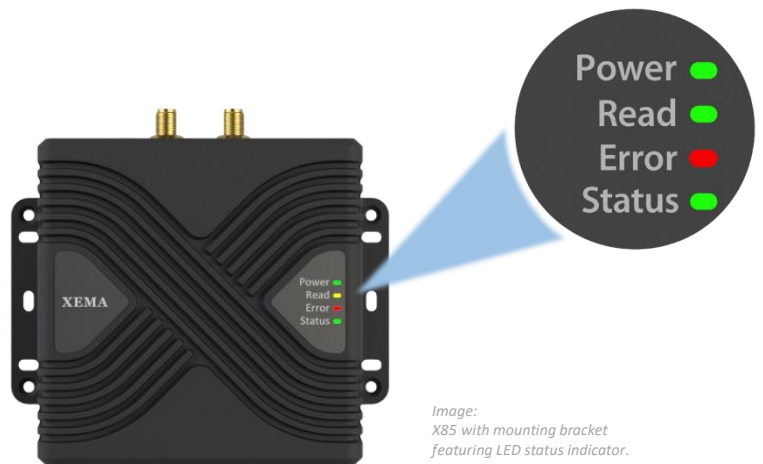


Image:
X85 with mounting bracket
featuring LED status indicator.

SPECIFICATIONS

RFID CHARACTERISTICS

| | |
|----------------------------|--|
| RF Engine | XEMA RFID module with Impinj E310/E710 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 | 28 or 33 dBm |
| Port Switching Time | < 10 ms |
| RX Sensitivity | < -70 or -83 dBm |
| Fastest Read Rate | Up to 300 tags/s or 1000 tags/s |
| Number of Channels | FCC: 50 hopping channels ETSI: 4 channels |
| DRM Mode | Supported (E710) |

CONNECTIVITY

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|----------------------------|--|
| 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

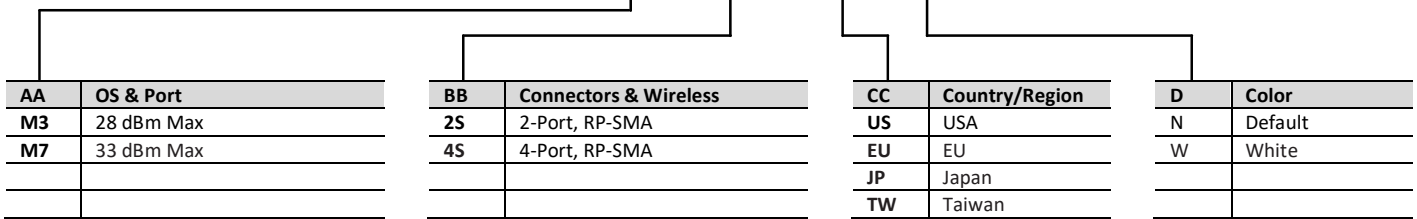
| | |
|--------------------------|---|
| Dimensions | 100 L x 90 W x 32 H (mm) 3.94 L x 3.54 W x 1.26 H (in) |
| Weight | 240~260 gr / 8.47~9.17 oz |
| Housing Material | Aluminum Die Cast and PC/ABS |
| Visual Indicators | 4-Multicolor LEDs: Power, Read, Error, Status |
| Operating Temp. | -20°C to 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 or USA |
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ORDERING INFORMATION

X85 - AA BB - CC D



Example: X85-M32S-USN is UHF RFID Linux 4-port reader with RP-TNC connectors for USA market.