MRX-D38 (UHF RFID Desktop Integrated Reader)

Product Introduction

The MRX-D38 is a high-performance UHF RFID desktop integrated reader, fully compliant with mainstream UHF RFID air interface protocols such as ISO/IEC 18000-63 (formerly 18000-6C) and EPCglobal Class 1 Gen 2. It offers adjustable output power ranging from 0dBm to 33dBm. With exceptional inventory capabilities and long-term stability, it excels even in environments with a high volume of RFID tags.

The MRX-D38 can be powered via PoE hub or PoE injector. In addition to RFID tag reading, it supports connections to multiple external USB devices (e.g., barcode scanners, printers). It is compatible with iOS, Android, Windows, and Linux platforms.

Featuring MQTT protocol support, the device enables efficient data exchange between the cloud and terminals by publishing and subscribing to topics on an MQTT server. This ensures flexible integration and adaptability to diverse business scenarios.

Key Features

- **Simplified Operation, Enhanced Efficiency** The all-in-one design allows for plug-and-play functionality, enabling rapid RFID tag reading and writing to significantly boost productivity.
- **Versatile Adaptability** Whether for jewelry inventory, employee badge tracking, smart warehousing, or self-checkout systems, the MRX-D38 delivers precise performance to meet varied needs.
- **Reliable Performance, Durable Design** Equipped with industrial-grade chips, it offers fast and accurate read/write capabilities with strong anti-interference performance. Capable of 24/7 continuous operation, it ensures uninterrupted business workflows.
- **Smart Connectivity, Secure Data** Supports MQTT protocol for seamless IoT integration, with SSL/TLS encryption to safeguard against data eavesdropping and tampering.

Typical Applications

- **Smart Retail**: Dynamically monitor inventory for unmanned retail solutions.
- **Logistics Tracking**: Report logistics tag data via MQTT and integrate with TMS (Transportation Management Systems) for end-to-end visibility.
- **Access Gates**: Precise control over identification range, with real-time data uploads to cloud or local systems.

Specifications

Category	Items	Specifications
RFID	Spec	ISO/IEC 18000-63 (Former 18000-6C) / EPCglobal Class 1 Gen 2
	Radio Frequency	916.8 ~ 922.0 MHz (JP) 902 ~ 928 MHz (US) 865 ~ 868 MHz (EU) 920 ~ 925MHz (CN)

Category	Items	Specifications
	Output	Max 33dBm
	Functions	Inventory/Read/Write/Lock/Kill

Power Source	Input	RJ45 ×1 PoE (IEEE802.3at compliant)
		* Be sure to use the following specifications for the PoE hub
		/injector and Ethernet cable to be used.
		  Ethernet cable: Category 5e or higher
		  PoE hub/injector: IEEE802.3at compliant

	Output	USB 2.0 Type-A ×4: 2500mW (4 ports total) *In case of connecting a device that requires more than the specified input, connect it via a self-powered USB hub.
Communication	Ethernet	RJ45
	USB 2.0 Type-A ×4	To connect HID communication devices such as barcode scanners and ESC/POS compatible printers.
	Console	Port for maintenance (not available for customer use).
Appearance	Dimensions	695 × 458 × 25 mm
	Weight	Approx. 3 kg
	Material	Aluminum + PMMA
	Color	White
	LED Indicator	Power LED – Red System LED – Orange Network LED – Green Data transmitting LED – Green
Environment	Operation Temp.	-10 ~ 45 °C, 20 ~ 85 % RH
	Storage Temp.	-20 ~ 60 °C, 10 ~ 95 % RH