

LR Reader Module 4/8/16CH UHF

M700



PRODUCT DESCRIPTION

The LR Reader Module 4/8/16CH UHF M700, powered by the innovative Impinj E710 reader chip, is available in three versions (4 Antenna / 8 Antenna / 16 Antenna) and capable of reading up to 900 RFID tags per second.

4-Channel Version

Ideal for compact installations with four TNC antenna connectors. Perfect for defined reading zones.

8-Channel Version

Provides flexibility with eight SMA connectors, making it ideal for medium-sized logistics and production applications.

16-Channel Version

Designed for large-scale setups with up to 16 SMA antennas, this version is perfect for complex conveyor or access control systems.

The durable housing is made of all-aluminum alloy, offering excellent heat dissipation and resistance to the rough and demanding environments commonly found in the industrial sector.

iDTRONIC's hardware comes with a useful SDK for the development of controller, Linux, or Windows-based applications. In addition to documentation, command protocols, and source codes, the SDK includes a Windows-based demo application providing full functionality across all supported UHF RFID standards.

APPLICATIONS

- Machine Authentification
- Automotive Production
- Logistics Applications
- Data Collection (IoT)
- · Robotics

FEATURES

- Based on IMPINJ Reader IC E710
- Up to 33dBm RD Power Output
- · Read Range up to 12m
- 4/8/16 External Antennas
- GPIO (4x Input / 4x Output)
- TCP/ IP, WIFI, RS232, Ethernet

RFID OPTIONS

• UHF (EPC C1 GEN2 | ISO 18000-63)



TECHNICAL DATA

ELECTRICAL SPECIFICATIONS		
Power Supply	DC 12V / 3A / PoE	
Power Rating	Standby 2.5W Work 13.5W (MAX) @+30 dBm	
PoE Power Supply	802.3af or 802.3at	
Operating Frequency	840 – 960 MHz, software programmable	
Output Power	5dBm-33dBm (±1dB) adjustable	
Operating Distance	up to 12 meters*	
Antennas	TNC-Male: 4 external (50 Ω) SMA - Male: 8 external (50 Ω) 16 external (50 Ω)	
Chipset	Impinj E710	
Max. Reading Rate	≥900 tags/s	
Status	Power Indicator, Status Indicator Antenna Indicator	
Connector Interfaces	RS232 RS485 Ethernet 10 – 100 M GPIO (4 IN and 4 OUT) Reserved WIA Antenna Interface	
Communication Interface	UART serial port (RS232), Baud rate 9600~115200bps	

MECHANICAL CONDITIONS		
Dimensions	183 × 174 × 25.5 mm	
Material	Aluminum / Plastic	
Protection Class	IP40	

ENVIRONMENTAL CONDITIONS		
Operating Temperature	-20°C up to +60°C	
Storage Temperature	-40°C up to +8°C	
Humidity	up to 90%, non-condensing	

SUPPORTED STANDARDS / TAGS

Standard ISO 18000-6C, EPC Class 1 Generation 2

APPLICABLE STANDARDS		
EMC	EN 301 489-3	
Radio Regulation	EN 302 208-2	
Safety	CEI EN 60950-1 CEI EN 50364	

SUPPORTED STANDARDS / TAGS		
Supported OS	Windows 7 or higher	
Supported Languages	C, C#/.NET, Java	

*Reading distance depends on tag, antenna and environmental conditions

PRODUCT IMAGES







ORDER CODES

VERSIONS	ORDER CODES
Long Range Reader Module UHF M700 - 4 Channels	OEM-UHF-M700-LR4C
Long Range Reader Module UHF M700 - 8 Channels	OEM-UHF-M700-LR8C
Long Range Reader Module UHF M700 - 16 Channels	OEM-UHF-M700-LR16C

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