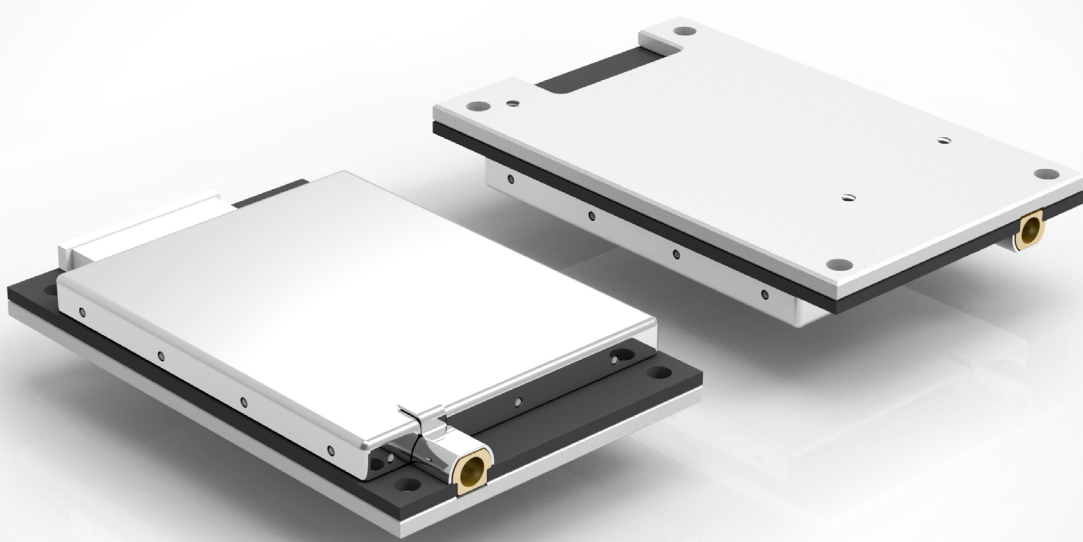


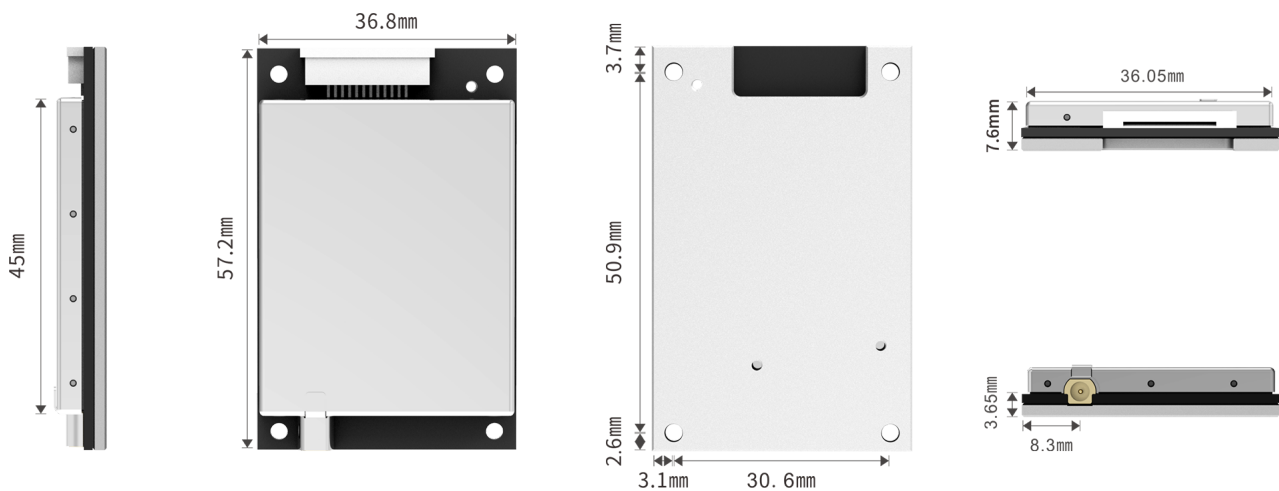


CMX10-1

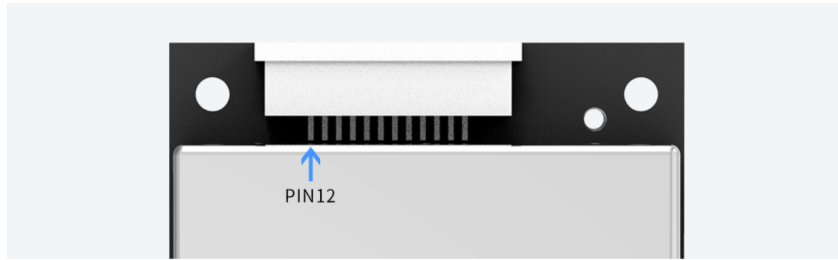
1-Port RFID Module

CM710-1 / CM510-1 / CM310-1 is a 1-port RFID module based on Impinj E710 / E510 / E310 chip. With the support of Impinj Gen2X, these modules provide superior UHF performance. It can be integrated in mobile RFID readers, fixed RFID readers, card issuers and etc. With high integration level, it is small in size, low in power consumption, resistant to electromagnetic interference and good at heat dispersion. The module appeals to challenging industries like warehousing, logistics, apparel, production lines and such.

Dimensions



Interface Definition (12 PIN)



PIN#	Interface	Description
1	VIN	3.5-5.25VDC
2	VIN	
3	GND	Ground
4	GND	Ground
5	EN	High LLT level (>1.2V) boot the module Low LLT level (<0.4V) out the module
6	IO1	Reserved GPIO 3.3V TTL level
7	IO2	Reserved GPIO 3.3V TTL level
8	IO3	Reserved GPIO 3.3V TTL level
9	RXD	UART receive 3.3V TTL level
10	TXD	UART transmit 3.3V TTL level
11	NC	
12	NC	

Specification

Model		Communication Interface	
1-Ports RFID Module	CM710-1 / CM510-1 / CM310-1	Connector	12 PIN FPC Connector
Development Board Module	CM-X_EDCB	Host Communication	UART 3.3V TTL Level Baud Rate: 115200bps
Physical Characteristics		Power Supply	
Dimensions	57.2 mm x 36.8 mm x 7.6 mm	Input Voltage	DC 3.5-5.25V
Weight	26.0 g / 0.92 oz.	Power Consumption in RF Output Mode	7.5W
RFID Features		Power Consumption in Standby (EN high TTL level)	0.175W;
RF Chip	Impinj E710 / 510 / 310	Power Consumption in Power Down (EN low TTL level)	42.5uW
Impinj Gen2X	Supported	User Environment	
Air Interface Protocol	EPCglobal Gen2 (ISO18000-6C)	Operating Temp.	-13°F to 149°F / -25°C to 65°C
Working Frequency	865-868 / 920-925 / 902-928 MHz (custom-design for frequency band)	Storage Temp.	-40°F to 185°F / -40°C to 85°C
Output Power	1-30dBm adjustable; 1dB step interval; +/- 0.5dB precision	Humidity	10% - 95%
Output Power Flatness	+/- 0.2dB	Reading Performance	
Antenna Interface	50Ω RF connector MMCX Receptacle	Fastest Read Rate	CM710-1: 950+ tags/s; CM510-1: 550+ tags/s; CM310-1: 250+ tags/s;
Regions Supported	FCC 902-928 MHz; ETSI 865.6-867.6 MHz; China 920-925MHz; Others for customization (865-868, 902-928MHz)	Reading Range	CM710-1: Up to 30m (with 4dBi antenna & M750 tag)
Receive Sensitivity	CM710-1: < -87 dBm; CM510-1: < -81 dBm; CM310-1: < -74 dBm;		CM510-1: Up to 20m (with 4dBi antenna & M750 tag)
Tag RSSI	Supported		CM310-1: Up to 10m (with 4dBi antenna & M750 tag)
Antenna Detector	Supported		
Ambient Temp Monitor	Supported		
Working Mode	Single/DRM		

Notice: Product specifications are subject to change without prior notice. / Model: CM710-1 / CM510-1/CM310-1 / Update Date: 2025-07-07

CHAINWAY®

Shenzhen Chainway Information Technology Co., Ltd

Address: 9F, Building2, Phase 2, Gaoxinqi Industrial Park, Liuxian 1st Rd., Bao'an District, Shenzhen, Guangdong 518102, China

Tel: 0086-755-23223316

Fax: 0086-755-23223310

Email: sales@chainway.cn

Web: <http://www.chainway.net>