8-Port UHF RFID Module **SIM7300**

Features

- Based on the New Generation Impinj E710 reader chip.
- Support EPC global Gen2 (ISO 18000-6C).
- 33dBm RF power output.
- 8 SMA connectors supporting 8 antennas.
- High performance of anti-collision recognition algorithm.
- Real-time monitoring of on-board temperature.
- Metal housing, helpful in heat dissipation.
- Small size and fully packaged, can be easily integrated into different types of RFID devices, such as retail RFID vending machine, RFID smart shelf.

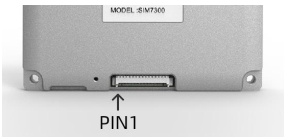
Specification

Physical Characteristics	
Dimensions	93.5mm × 80.3mm × 8mm
Net Weight	118g
RFID Characteristics	
Air Protocols	EPC Class 1 Gen 2 (ISO 18000-6C)
Chipset	Impinj E710
Frequency	USA: 902-928MHz FCC (NA, SA)
	EU: 865-868MHz (ETSI)
	CN: 920-925MHz
Antenna Ports	8 ports, 50Ω SMA Connectors
Output Power	5dBm-33dBm (±1dBm) adjustable
Sensitivity	-85dBm
Channel Isolation	50dB
Work Mode	Fixed / hop frequency optional
Tag RSSI	Support
Antenna Detector	Support
Temperature Detector	Support

RFID Performance	
Max Read Rate	≥900 tags/s
Max Tag Read Distance	≥12m with 8dBi antenna
Application Interface	
Host API	C, C#/.NET, Java
Communication Interface	
Communications	UART serial port Baud rate 9600~921600bps
GPIO	2 Inputs (DC 0~3.3V), 2 Outputs (DC 0~3.3V)
Power Supply	
Input Voltage	5.0 VDC+/-5%
Power consumption in RF output mode	8.5W, 1.7A@5V, 33dBm
Working Environment	
Operating Temp.	-20°C to +55°C
Storage Temp.	-40°C to +85°C
Humidity	5-95% Non-condensing (+25°C)

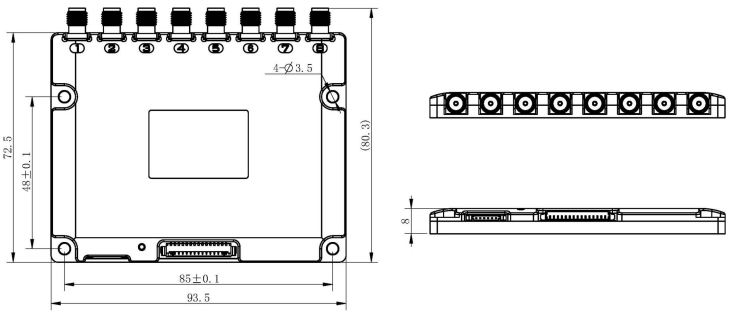
*With an absolute maximum of +30 dBm. Maximum power may have to be reduced to meet regulatory limits, which specify the combined effect of the module,antenna, cable, and enclosure shielding of the integrated product.
*Specifi cations subject to change without notice.

FPC Connector Definition



Pin#	Signal	Pin#	Signal
1	GND	9	RXD (DATA INPUT,TTL level)
2	GND	10	TXD (DATA OUTPUT,TTL level)
3	VCC +5V ±0.25V	11	NC
4	VCC +5V ±0.25V	12	NC
5	GPIO1 (OUT1)	13	NC
6	GPIO2 (OUT2)	14	SHUTDOWN (low level enabling, high level power off, high level should be greater than VCC-0.3V)
7	GPIO3 (IN1)		
8	GPIO4 (IN2)	15	nRST (Reset, low-power calming position)

Mechanical Drawing



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IMPINJ E710 Reader Chip
IMPINJ Inside