



iData R400

Four-channel/eight-channel fixed mount RFID reader/writer

High isolation between channels and strong anti-interference ability

iData R400 is a lightweight and compact fixed mount RFID reader/writer that uses modules based on the Impinj E710 chip and supports Impinj Gen2 X. It has excellent ultra-high frequency performance and powerful read and write capabilities. Equipped with multiple specifications of antennas and high reliability industrial design, it has superior electromagnetic interference resistance and heat dissipation performance. It can adapt to harsh production environments such as warehouses. Overall, it is stable, reliable, and durable. The reader/writer can be controlled by sending instructions through the network, suitable for application scenarios such as production lines, logistics, access control systems, anti-counterfeiting systems, etc.

High isolation between channels, strong anti-interference ability

Adopting a four or eight channel design and SMA interface, the ports have high isolation (>40dBc) between them, reducing crosstalk issues between ports from within the reader/writer.

Unique anti-collision algorithm with outstanding performance

Our self-developed efficient anti-collision algorithm achieves superior reading performance and more accurate tag recognition in fast and dense multi-tag recognition scenarios.

Industrial grade design, good reliability

Durable industrial grade design, 1-meter anti-drop, impact resistance, maintaining high reliability in various harsh application environments.

Multiple communication methods for rapid deployment

Having multiple communication methods such as TCP/IP, RS-232, GPIO, etc., it adapts to different access methods in different environments, facilitates and quickly connects to various terminals, and completes deployment quickly.



warehouse
management



Production
management



Fixed asset
management



Book
Archives

R400 Technical Specifications

System Configuration

Power	DC (12V~24V), POE(802.3af 13W), POE+(802.3at 25.5W)
Working current	1.2A(33dBm@12V)
Standby current	0.1A
GPIO Interface	4-channel photoelectric input/3-channel output, 5V or 12/24V power output
Communication interface	RJ45、RS-232, Wi-Fi (optional)
Communication protocol	TCP/HTTP/MQTT
Man-machine interface	Buzzer: Prompt when power on; Prompt when reading tags(can be configured) PWR: Power light (constant red when power on); RUN: Flashing Blue light when working properly
API support	Android, JAVA, C#(.NET), C++(VC)

Structure Parameters

Size (H * W * D)	120mm*120mm*26mm(L*W*H)
Weight	Four-channel: 415g Eight-channel: 480g
Colour	black
Material	aluminum alloy

Accessories

Standard	Power adapter * 1, GPIO Connector(12 Pins) *1
Optional	Wi-Fi antenna (SMA male connector)*1

UHF RFID

Communication protocol	EPC global C1Gen 2 (ISO 18000-6C)
Impinj Gen2X	support
Frequency	FCC 902MHz~928MHz (USA) CE 865MHz~867MHz (EU) CN 920MHz~925MHz (China) 860-960MHz (customizable)
Output power	0~33 dBm (1 dBm stepped adjustment)
Port isolation	>40dBc
Reading speed	Up to 900tags/s
RF interface	4 / 8 channel 50Ω SMA connector (SMA femal cradle)

Environmental Parameters

Working temperature	-25°C~+65°C
Storage temperature	-40°C~+85°C
Humidity	5%~95% (no condensation)
Vibration resistance	Frequency range 5-100Hz, duration 30 minutes, acceleration 4.9m/s2
Impact resistance	Endure maximum acceleration of 30m/s2, amplitude of 0.3mm, 50Hz, and duration of 2 minutes in three directions respectively
Anti-static	Contact discharge ± 4KV, air discharge ± 8KV
Electric fast transient pulse train	Power cord withstand voltage 1KV, signal cord withstand voltage 0.5KV
Radiated electromagnetic field immunity	Field strength 3V/m, frequency range 80-1000MHz
Surge immunity	Power cord: live wire to neutral wire withstand pulse voltage of 1KV Live wire to ground wire withstand pulse voltage of 2KV Neutral to ground withstand pulse voltage of 2KV Signal cord: withstand pulse voltage of 1KV

The information of iData products and software service may be subject to change without notice. Please contact your iData sales representative for the latest details.



Official Website

WUXI IDATA TECHNOLOGY CO., LTD.

Address: Floor 11, Building B1, Wuxi (Binhu) National Sensing Information Center,
No.999 Gaolang East Road, Wuxi City, Jiangsu Province, P.R.C.

E-mail: sales@idataglobal.com

Website: www.idataglobal.com