



iData U500-09

RFID integrated reader/writer

Mid distance reader/writer with unique anti-collision algorithm

iData U500-09 is an RFID industrial integrated reader/writer, equipped with self-developed anti-collision algorithm, which has excellent reading performance and accuracy. The whole machine adopts industrial grade design and has good dust-proof and waterproof protection. It can adapt to harsh warehouse or outdoor environments and can be applied to various RFID systems such as assets management, warehousing, logistics, vehicles, etc. It is a widely used and high-performance RFID industrial reading and writing device.

Medium distance design to meet most application requirements

The H9 white card reading distance at 30dBm power is 28 meters, meeting the performance requirements in most application scenarios.

Rugged and reliable Industrial design

Supporting IP67 industrial rating and excellent dust-proof and waterproof. It is the optimized choice for industrial applications in complex and harsh working environments.

Unique anti-collision algorithm with outstanding performance

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



Warehousing management



Logistics management



Asset Management



Vehicle management

U500-09 Technical Specifications

System Configuration

Power	DC (12V~24V)、POE (802.3af 13W)、POE+ (802.3at 25.5W)
Maximum working current	0.95A(33dBm)
Standby current	0.13A
GPIO	2-channel photoelectric input, 2-channel relay output (standard) or 4-channel photoelectric input (optional)
Communication interface	RS-232, TCP/IP, WIFI (optional), One lane 485 (optional) Supports one lane of Wiegand 26, 34, 66 (optional)
Buzzer	The buzzer will prompt when powered on and prompt once when reading the label (can be configured)
Communication protocol	TCP/HTTP/MQTT
API support	Android, JAVA, C#(.NET), C++(VC)

Environmental parameters

Working temperature	-25°C~+65°C
Storage temperature	-40°C~+85°C
Humidity	5%~95% (no condensation)
IP rating	IP67
Anti-vibration	Frequency range 5-100Hz, duration 30 minutes, acceleration 4.9m/s ²
Impact resistance	Endure maximum acceleration of 30m/s ² , 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 cable withstand voltage 1KV, signal cable 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 Zero to ground withstand pulse voltage of 2KV Signal cable: withstand pulse voltage of 1KV

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)
Antenna specifications	9dBi circularly polarized antenna
Lobe width	Hor: 70°±5°, Ver: 70°±5°
Standing-wave ratio	≤1.4
Impedance	50Ω

Structure Parameters

Size (H * W * D)	260x260x70mm (L x W x H)
Weight	1250g
Radome material	ASA (anti-UV/anti-flaming)
Radome color	white
Pole diameter	Φ30-50 mm

Equipment accessories

Standard accessories	Power adapter * 1, Cradle *1, GPIO plug(6 PIN)*1
WIFI antenna	Wi-Fi Antenna (SMA male connector)*1

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