UHF RFID READER · INTEGRATED

Gate 225

UHF RFID Integrated Reader · IP65 Outdoor



The **Gate 225** is an integrated UHF RFID reader with a built-in **8.5 dBi circularly polarised antenna** in a single IP65 housing. It reads tags at **more than 8 m** and handles over **150 tags per second** at peak — small, light and quick to deploy.

A wide 9–24 V DC input, RJ45, RS485, RS232 and Wiegand interfaces, optional Wi-Fi, Bluetooth and 4G, and remote OTA upgrades suit asset management, warehouse and logistics access control, and personnel and vehicle management.

>8 m	>150/s	IP65	9–24 V
READ RANGE	TAGS, PEAK SPEED	PROTECTION	DC WIDE INPUT

KEY FEATURES

Antenna and reader in one

8.5 ±0.5 dBi circularly polarised antenna built into the reader — compact, light and easy to deploy.

IP65 outdoor housing

Double waterproof rubber rings on the rear cover and antenna cavity; durable ABS+PC shell for long outdoor use.

Flexible connectivity

RJ45, RS485, RS232 and Wiegand 26/34 as standard; Wi-Fi, Bluetooth and 4G optional.

Easy integration

SDK for C#, C++ and Java, remote OTA firmware upgrade and lightweight MQTT IoT protocol.

TECHNICAL SPECIFICATIONS

Full Datasheet

UHF RFID

Frequency	902–928 MHz or 865–868 MHz (adjustable by region)
Built-in antenna	8.5 ±0.5 dBi, circularly polarised
Air interface	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C
Output power	Up to 33 dBm, adjustable in 1 dBm steps (software)
Read range	More than 8 m (Impinj E41b test tag)
Multi-tag speed	>150 tags/s (peak)
Regions	FCC Part 15 · ETSI EN 302 208 · China, India, Japan, South Korea, Malaysia, Taiwan

PHYSICAL & POWER

Dimensions	225 × 225 × 55 mm (excl. bracket and wiring)
Weight	2000 g (incl. packaging)
Shell / rear cover	ABS+PC
Radome colour	Ceramic white
Bracket	Galvanised anti-rust iron
Installation	Pole mounting
Power supply	220 V AC adapter, +9 V / 3 A DC output · DC 9–24 V input
Consumption	<10 W average
In the box	Power adapter, mounting bracket, communication cable

COMMUNICATION & SOFTWARE

CPU	ARM Cortex-M3
Interfaces	RJ45, RS485, RS232, Wiegand 26/34 (standard)
Optional	Wi-Fi IEEE 802.11b/g/n · Bluetooth 4.2 · 4G
Data rate	Serial 9600–115200 bps · RJ45 10 Mbps
GPIO	2 inputs, 2 outputs
Firmware	Remote OTA upgrade
Software	API packages and examples (Windows, Android) · SDK: C#, C++, Java · MQTT
Read prompt	Buzzer · multi-colour LED

ENVIRONMENT

Operating temp.	−20 °C to +65 °C
Storage temp.	−25 °C to +70 °C
Humidity	5–95% RH, non-condensing
Protection	IEC IP65
Drop height	1.2 m
Lightning	DC grounding

APPLICATION AREAS

- Asset management
- Warehouse & logistics access control
- Garbage classification management
- Personnel management
- Vehicle management

RFID·BG

Talk to Bulgaria's RFID team

End-to-end deployment: consulting, hardware, software, install & support.

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