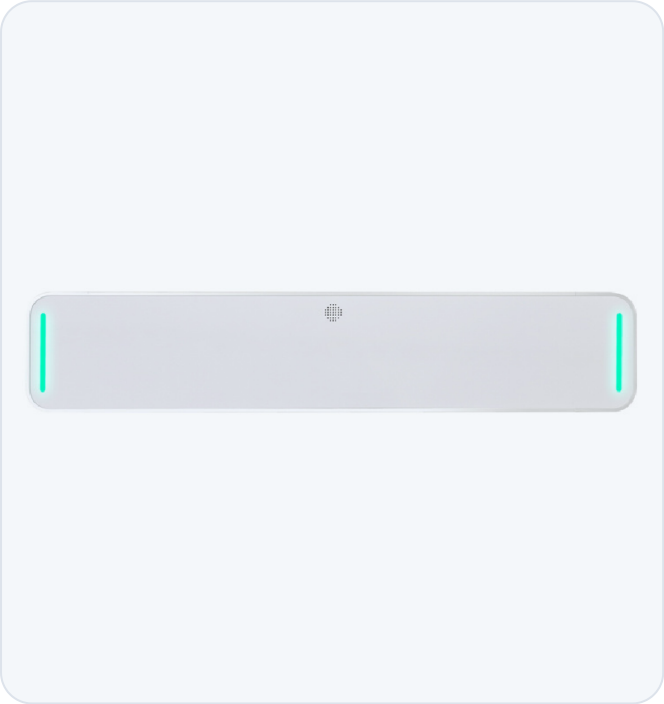
RFID ACCESS CONTROL · TOP-MOUNTED

Gate 10020

Ceiling-Mounted RFID Access Control Gate



The **Gate 10020** mounts overhead on a ceiling or suspended ceiling — easy to install and taking up zero floor space. It identifies UHF RFID-tagged goods intelligently as they pass beneath, and integrates an audible-and-visual alarm that flags unauthorised tags in real time.

Built for warehouse in-and-out control, retail anti-theft, and library / archive borrowing — fast batch reading with a controllable, blind-spot-free detection zone.

6–10 m	33 dBm	IP65	<10 W
READING DISTANCE	MAX RF OUTPUT	PROTECTION RATING	POWER DRAW

KEY FEATURES

Narrow-beam antenna
Controllable read zone that won't overflow — eliminates blind spots and mis-reads.

Sound & light alarm
Real-time monitoring with audible-visual alerts for illegal tags and anti-theft control.

Overhead installation
Ceiling, suspended ceiling, wall or pole — saves floor space and cuts install cost.

High recognition rate
Dense read/write, tag filtering, RSSI signal sensing and online firmware upgrade.

TECHNICAL SPECIFICATIONS

Full Datasheet

PERFORMANCE

Frequency range	902–928 MHz (US) / 865–868 MHz (EU) · region-customizable
Antenna	Dual-angle, dual-antenna circularly polarized
Antenna gain	10 ±0.5 dBi
Beam width	Hor 70°±2 · Ver 38°±2
Frequency modulation	FHSS or fixed frequency, software-configurable
RF output	33 dBm ±1 dBm (max), 50 Ω load
Power regulation	1 dB step
Communication	RS232, RS485, Wiegand 26/34, TCP/IP, wireless (opt.)
Comm. rate	Serial 9600–115200 bps · RJ45 10/100 Mbps adaptive
GPIO	I/O interface (PR9 connector)
Alarm	Audible alarm
Power consumption	< 10 W average
Software interface	API SDK + VC, VB & Java examples

LABEL OPERATION

Reading distance	6–10 m typical (10 dBi antenna, tag-dependent)
Air interface	ISO 18000-6C (EPC Gen2), ISO 18000-6B, GB/T 29768-2013 (opt.)

MECHANICAL & ELECTRICAL

Dimensions	1000 (L) × 200 (W) × 45 (H) mm
Power supply	220 V AC in / +12 V 3 A DC out
Panel material	Acrylic
Frame material	Aluminum alloy
Radome color	White or grey
Weight	3 kg
Installation	Ceiling, wall or pole
Pole diameter	35–50 mm
Humidity	5–95%, non-condensing
Protection	IEC IP65
Operating temp.	−20 °C to +60 °C
Lightning protection	DC grounding

OPTIONAL SENSING

- **Infrared trigger** — height ≤ 3 m
- **360° 2D LiDAR** — range 0.05–12 m (80% reflectivity), 0–360° scan, 20 mm accuracy, Class I eye-safe
- **mmWave radar** — 77–78 GHz, 40 m detection; 0.2 m distance / 1.9 km/h speed resolution

APPLICATION AREAS



- Warehouse material in-and-out management
- Retail footwear & clothing anti-theft
- Library & archive borrowing control
- Batch identification of in/out assets & anti-theft alarm

RFID·BG

Talk to Bulgaria's RFID team

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

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