Technical documentation · GVision Italia

GV-RDS180

Mid-Range Security Radar, 24 GHz

24 GHz · 150 m human · 180 m vehicle · IP66

Key Features

- FMCW radar: detection by day and night, in fog, rain, snow and backlight
- Position, distance, direction and speed output for every target
- Alarm, pre-alarm and exclusion zones drawn on a map
- Target class filter to reduce false alarms
- Automatic linkage with GVision PTZ cameras enabled for radar tracking via RS485, as specified by GVision Italia at design stage
- 360° coverage by combining three or four units
- Relay and digital outputs for sirens, illuminators and control panels; digital input and RS485
- Firmware maintained by GVision Italia, with vulnerability handling as a CNA under the ENISA Root
- NDAA-compliant series, suitable for supplies with component-origin requirements

Specifications

Parameter	Value
Radar	
Principle	Frequency-modulated continuous wave (FMCW)
Frequency band	24.00–24.25 GHz
Detection	
Range, human	up to 150 m
Range, vehicle	up to 180 m
Coverage	90° horizontal, 13° vertical
Detectable speed	0.5–30 m/s
Speed accuracy	±0.03 m/s, resolution 0.06 m/s
Range accuracy	±0.5 m, resolution 1 m
Angular accuracy	±1°
Refresh rate	8 Hz
Classification	Human, vehicle
Functions	
Zones	Alarm, pre-alarm, exclusion, drawn on a map
Target filter	By target class
PTZ linkage	Automatic pointing and tracking; several PTZ per radar, several radars per PTZ

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Design and specifications are subject to change without notice. The latest product information is available at www.gvision.it

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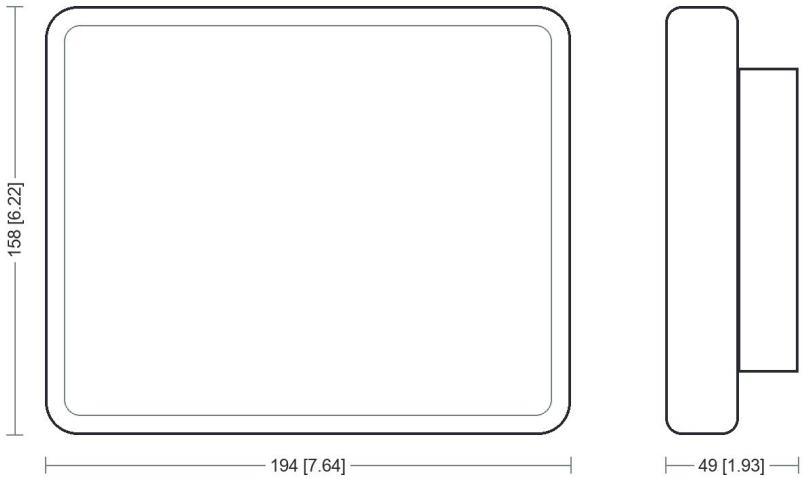
360° coverage	With three or four combined units
Interfaces	
Network	1 × RJ45 10/100 Mbps, PoE
Serial	1 × RS485
Relay outputs	2
Digital outputs	2
Digital inputs	1
Protocols	HTTP, TCP, UDP, NTP
General	
Power supply	PoE (IEEE 802.3af) / 12 VDC
Power consumption	Max 8 W
Ingress protection	IP66
Operating temperature	−40 to +75 °C
Storage temperature	−40 to +85 °C
Dimensions	194 × 158 × 49 mm
Weight	approx. 1.0 kg
Compliance	NDAA

Dimensions



Unit: mm [inch]

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Ordering information

Model	Description	Band
GV-RDS180	Mid-range security radar, 24 GHz, 90°	24.00–24.25 GHz

Mounting brackets and installation accessories on request.

Company credentials

CVE Numbering Authority	GVision Italia is a CVE Numbering Authority under the ENISA Root, designated on 5 May 2026, the first Italian CNA under ENISA Root. Vulnerabilities affecting the products we place on the market are assigned and published by us, with coordinated disclosure to the end customer.
Cyber Resilience Act and NIS2	Firmware maintained by GVision Italia, security updates and a documented vulnerability handling process, in line with the obligations applying to connected products on the EU market.
ISO/IEC 27001:2022	Information security management system.
ISO 9001:2015	Quality management system, scope extended to cybersecurity procedures (cert. GVIS3330Q2101, EuCI), IAF sectors 29 and 33.
ISO 14001:2015	Environmental management system.

GVision Italia S.r.l. is the exclusive Italian Terminal Manufacturer for GeoVision Inc. (Taiwan).

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