movyon electronics

RADAR

Movyon Electronics 24.0 GHz FMCW (Frequency Modulated Continuous Wave) radar, exploiting the Doppler effect and continuous frequency modulation, allows to reliably detect the instantaneous speed and distance to the antenna of moving vehicles. Resistant to even the most extreme weather conditions, this radar can identify the transit, direction and class of vehicles moving between 30 and 300 km/h, with an accuracy of over 97%.
Available in two variants, it offers connectivity and power through RJ45 or 14-way connectors.
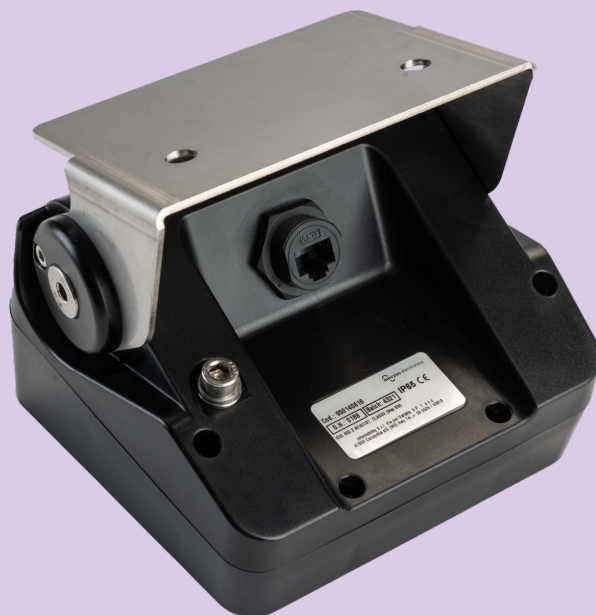

INSTALLATION PARAMETERS

- Installation: between 5,20 and 6,20 m high from the ground

- Horizontal position: in the middle of the lane to control, tolerance allowed ± 40 cm

- Lane width typical: 3,60 m, max 3,75 m

- Tilt of the antenna, referred to a horizontal plane: 32°±3°

- Two types of installation bracket: universal bracket or aluminum bracket

- Required plugin cable connector (not included):

  o RJ45 type "RCP-00BMMS-SLM7001"

  o 14-way connector type "MS3116-J12-14S", to interface the device to the SICVe system

DIMENSIONS AND SPECIFICATIONS

- Weight: < 1 kg

- Dimensions: 160x160x120 mm

- Degree of protection: IP66

- Operating temperature: -20° C/+70° C

- External power supply (24 Vdc/PoE)

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TECHNICAL SPECIFICATIONS

RF SECTION

RECEIVER

- Sensitivity: 24.000-24.250 GHz
- Operative Frequency Range:
  - F1: [24.005 – 24.120] GHz
  - F2: [24.130 – 24.245] GHz
- Classe: 3

TRANSMITTER

- Frequency: 24,000-24,250 GHz
- Operative Frequency Range:
  - F1: [24.005 – 24.120] GHz
  - F2: [24.130 – 24.245] GHz
- Transmission Power: 20 dBm
- Modulation: Triangular FM

ANTENNA

- Type: Integral Patch Array
- Gain: 17 dBi

DIGITAL BOARD

- Dual Core Blackfin Processor @500 MHz clock
- 256 MBytes DDR2 Ram
- Operating System ucLinux

FUNCTIONING PARAMETERS

14-WAY CONNECTOR:

- Input Voltage: 24 Vdc
- Power: 0,3 A
- 10/100 Ethernet Port
- RS485 Asynchronous Serial Line

RJ45 CONNECTOR:

- Entry: IEEE 802.3 AF/AT/BT Powered Device (37/57 Vdc, 48 Vdc Nominal)
- PoE Functioning Class: Class 3 (13W Max) Type 3
- 10/100 Ethernet Port