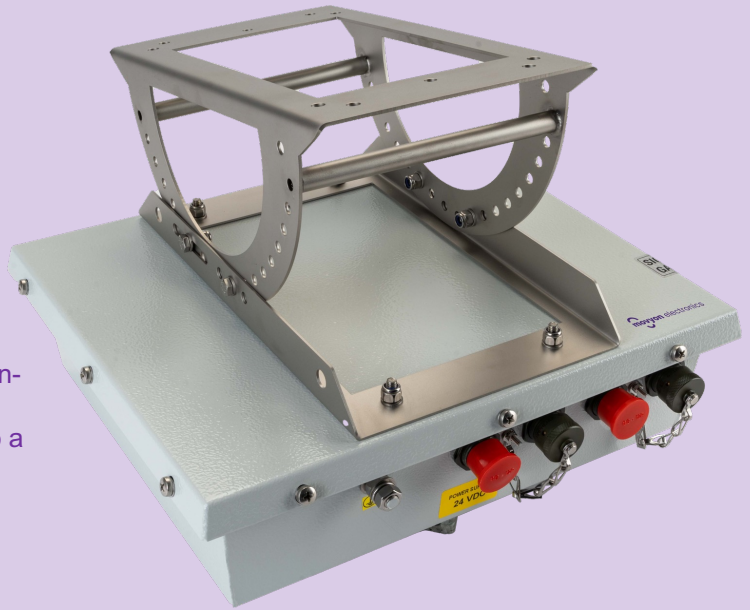


# DSRC RSU

Radio frequency antenna capable of communicating with on-board equipment according to the standards: EN 15509, ETSI ES 200 674-1 and UNI 10607. This device belongs to a family of antennas capable of meeting multiple needs such as, for example, traffic monitoring, access control, toll collection, and enforcement.



## TECHNICAL FEATURES

### RF SECTION EN 15509

#### RECEIVER

- Receiver Sensitivity: < -104dBm
- Subcarrier Frequencies: 1.5 – 2 MHz
- Subcarrier Modulation: 2-PSK
- Data Coding: NRZI
- Bit Rate: 250kbps

#### TRANSMITTER

- Power Output:  $\leq +33$ dBm EIRP
- Carrier Modulation: 2-ASK
- Data Coding: FM0
- Bit Rate: 500 kbps
- Carrier Frequencies: F1 5797.5 MHz; F2 5802.5 MHz; F3 5807.5 MHz; F4 5812.5 MHz

### RF SECTION ETSI ES 200 674-1 and UNI 10607

#### RECEIVER

- Receiver Sensitivity: < -98 dBm
- Subcarrier Frequencies: 10,7 MHz
- Subcarrier Modulation: FSK
- Data Coding: Manchester
- Bit Rate: 144 Kbps

#### TRANSMITTER

- Power Output:  $\leq +21$  dBm
- Carrier Modulation: OOK
- Data Coding: Manchester
- Bit Rate: 921 Kbps
- Carrier Frequencies: 5,8 GHz

# DSRC RSU



## DIGITAL BOARD

- CPU: Dual Core Cortex A9
- RAM: 512 MByte
- 8 GByte eMMC
- EEPROM: 512 KBit
- Ethernet: 1 Gbit
- 3 axis accelerometers
- Silicon ID
- 1 microSD Card
- Temperature sensor
- RTC + SuperCap
- 3 configuration inputs
- 6 LEDs

## INSTALLATION

- The unit is designed to be installed in the center of an access/exit lane
- The installation parameters and coverage/dialogue area with the on-board equipment are different depending on the type of application and antenna model

## DIMENSIONS AND SPECIFICATIONS

- Supported power supply:
  - 230 VAC  $\pm 10\%$  (< 25W)
  - PoE: IEEE 802.3 AT/BT Class 4 (48 Vdc max 20 W)
  - 24 VDC (< 20W)
- Weight: ~5 kg
- Degree of protection: IP65
- Operating temperatures: -40/+55 °C
- Storage temperatures: -40/+70 °C

## KEY FEATURES

- DSRC Standard
- Linux Operating System
- Full transaction management
- Ability to operate in transparent mode
- Contains no moving parts
- High speed of replacement