

# DSRC DESKTOP

The DSRC Desktop device is an antenna designed to establish a short distance connection with an on-board device (OBU).



## TECHNICAL FEATURES

### DIGITAL BOARD

- ⊙ Linux O.S.
- ⊙ CPU: Arm9 400MHz
- ⊙ Ram: 64 Mbytes
- ⊙ Mass memory: 512MB (flash nand)
- ⊙ EEprom: 512 Kbit
- ⊙ Silicon ID (unique number)
- ⊙ Ethernet 100BaseTX

It can be Stand Alone (SA) or NetWork (NW) type and is based on UNI 10607 or ETSI ES 200 674-1 standards. It is equipped with a microprocessor board that can be run by application software for radio frequency control and integrates all necessary features, including the radio frequency section and the patch antenna.

The SA unit, equipped with a button, is capable of autonomously performing a complete transaction, configurable via file, which only requires Start/Stop commands and configuration.

The NW device, on the other hand, sends received messages through the radio frequency network and vice versa. In this case, the entire message construction is performed by an external controller.

## DIMENSIONS AND SPECIFICATIONS

- ⊙ Dimensions: 124x88x70 mm
- ⊙ Weight: 480 g
- ⊙ Power supply: 12 VDC
- ⊙ Consumption: 8 W max
- ⊙ Operating temperature: +5/+35°C
- ⊙ Indoor use device
- ⊙ Relative humidity: 95% (non-condensing)

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## SECTION RF ETSI ES 200 674-1

<b>Reception</b>	Receiver Sensitivity	≤ -96dBm
	Subcarrier frequencies	1.5 – 2 MHz
	Subcarrier Modulation	2-PSK
	Data Coding	NRZI
	Bit Rate	250 kbps
<b>Transmission</b>	EIRP programmabile	Max + 14 dBm
	Communication distance	0 – 250 cm circa (programmable via software)
	Carrier Modulation	2-ASK
	Data Coding	FM0
	Bit Rate	500 Kbps
	Subcarrier Frequencies	1.5 – 2 MHz
	Carrier Frequencies	<ul style="list-style-type: none"> <li>• F1 = 5.7975 GHz</li> <li>• F2 = 5.8025 GHz</li> <li>• F3 = 5.8075 GHz</li> <li>• F4 = 5.8125 GHz</li> </ul>

## SECTION RF UNI 10607

<b>Reception</b>	Receiver Sensitivity	≤ -96dBm
	Subcarrier frequencies	10,7 MHz
	Subcarrier Modulation	2-FSK
	Data Coding	Manchester
	Bit Rate	144 kbps
<b>Transmission</b>	EIRP programmabile	Max + 14 dBm
	Communication distance	0 – 250 cm circa (programmable via software)
	Carrier Modulation	ASK-OOK
	Data Coding	Manchester
	Bit Rate	921 Kbps
	Carrier Frequencies	F1 = 5,8 GHz