

# HIRSCHMANN MOBILITY

# AM/FM/ DAB Screw Antenna



**RDA 015 24 RD S/series**

Pt no.

**951-021-...**

- Different power option (external or phantom feed)

Subject to alterations

## Technical data

### Electrical Specification AM/FM

Frequency range	AM	0,15 – 1,71 MHz
	FM	87 - 108 MHz
VSWR	Band II (FM)	< 2
Impedance		50 Ohm
Gain	LF	5,7 ±2 dB
	MF	5 ±2 dB
	Band II (FM)	10 ±2 dB
ΔIM3 – Pout = 110dbμV	LF f=(300 ±50) kHz	49 dB
	MF f=(1000 ±50) kHz	56 dB
	Band II f=(98 ±0,5) MHz	61 dB
Noise figure	LT	-10 dBμV
	MF	-11 dBμV
	Band II/FM	4,8 dB
Voltage supply (Ext.power supply for all versions)	min.	8 V
	max.	14 V
Current consumption	min.	75 mA
	typ.	83 mA
	max.	90 mA

### Electrical Specification DAB

Frequency range		174 – 240 MHz
VSWR		≤ 2
Impedance		50 Ohm
Gain (linear gain, vertical polarization)	Band III	21 -3/+2 dB
ΔIM3 – Pout = 110dbμV	Band III f=(207±0,5) MHz	61 dB
Noise figure	Band III	1,9 dB
Voltage supply	min.	8 V
(External or phantom acc. to versions)	max.	14 V
Current consumption	min.	45 mA
	typ.	55 mA
	max.	65 mA

### Mechanical

Dimensions		95 x 57 x 40 mm (+ 200 mm optional rod)
Materials	Housing	PA6
	Nut	Zamak
	Optional rod	Santoprene
Weight		180 g
Operations temperature range		- 40 + 85° C
Storage temperature range		- 40 + 85° C

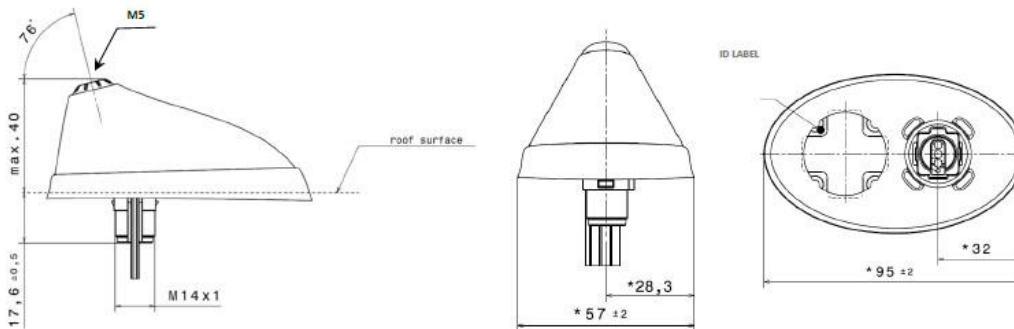
# AM/FM/ DAB SCREW ANTENNA

RDA 015 24 RD S Pt no. 951-021-...

Housing protection class	IP67
Cable type	RF RG174 / Power fly 0,5mm <sup>2</sup>

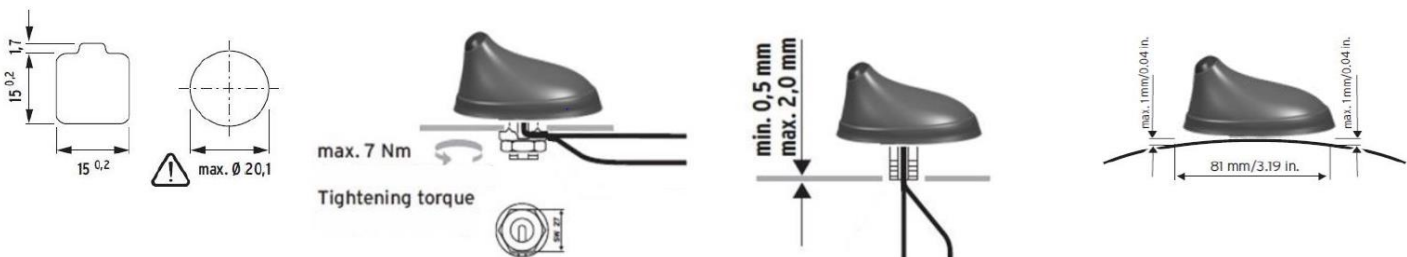
Versions		Cable length	AM/FM	Pw	DAB	Pw
951-021-101	RDA 015 24 RD S FAf FBf 0,3	~ 300 mm	FAf	6,35	FBf	Phantom
951-021-001	RDA 015 24 RD S FAf FBf 0,3 – wo Rod	~ 300 mm	FAf	6,35	FBf	Phantom
825-062-001	Rod AM/FM DAB 200mm M5	na				

## Technical drawings



## Installation

- Take the necessary electrostatic precautions for a connection of electronic components (Potential ESD < 1 kV)
- Surface must be quite flat (maximum radius 1cm per meter)
- Standard max surface thickness 2 mm (up to 10mm possible on request)
- No metallic (conductive) surface above the antenna
- Connectors are not waterproof, so area below the antenna must be dry
- Drill a hole (diameter 20 +/- 0,1mm) (clean with isopropyl alcohol or similar)
- Screw the nut on the grounding plate (6 Nm +/- 15%)
- No adjunction of any material (silicones, glue, ...)
- Check that the wires respect the appropriate way:
  - Not electrically charged (Potential ESD < 1 kV)
  - Not pulled / stressed
  - Bending radius > 25mm
  - Not in contact with aggressive part



[www.te.com/hirschmann-mobility](http://www.te.com/hirschmann-mobility)

[hirschmann-mobility@te.com](mailto:hirschmann-mobility@te.com)

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