HIRSCHMANN MOBILITY

WLAN (2.4GHz/5.8GHz) Screw Antenna

WLAN 2458 LP S MIMO/series

Pt no.

951-001-...

Subject to alterations

- Low Profile antenna
- Mount on any surfaces (e.g. plastics, metal...)
- For WLAN networks (2,4 GHz or/and 5,8 GHz)
- Diagnostic resistance possible on MIMO 2
- Public transport or building indoor & outdoor, M2M application

Technical data

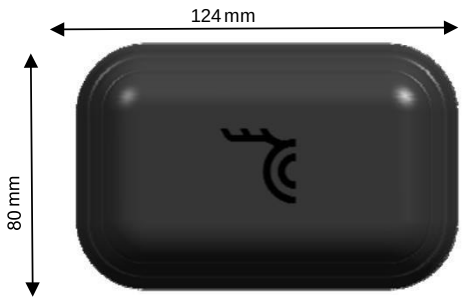
Electrical Specification		
Frequency range	Bluetooth: IEEE 802.11 b, g, n, ax: IEEE 802.11 a, h, n, ac, ax: IEEE 802.11 n: IEEE 802.11 p:	2400 - 2484 MHz 2412 - 2484 MHz 5150 - 5725 MHz 2400 - 2484 MHz 5150 - 5725 MHz 5755 - 5925 MHz
Impedance		50 Ohm
VSWR	2400 – 2485 MHz 5150 – 5925 MHz	≤ 1,6 ≤ 1,6
Polarization		Linear, vertical
Gain (linear gain, vetical polarization)	2400 – 2485 MHz 5150 – 5925 MHz	2,5 dBi* 3 dBi*
Isolation	Port 1-2 & 2-3 (for MIMO3) Port 1-3 (2400 - 2485 MHz) Port 1-3 (5150 - 5925 MHz)	> 10 dB > 16 dB > 18 dB
Load capacity	IEEE 802.11 b, g, n, ax: IEEE 802.11 a, h, n, ac, ax: IEEE 802.11 n: IEEE 802.11 p:	≤ 200 mW ≤ 1000 mW ≤ 200 mW (2,4 - 2,84 GHz) ≤ 1000 mW (5,1 - 5,72 GHz) ≤ 8 W EIRP (5,79 - 5,81 GHz) ≤ 2 W EIRP (5,85 - 5,92 GHz)
Mechanical		
Dimensions		ca. 124 mm x 80 mm x 31 mm
Housing Materials		ASA-PC
Weight		270 g
Operations temperature range		- 40 + 85° C
Storage temperature range		- 40 + 85 °C
Housing protection class		IP66 (acc. IEC 60529)
Cable type		RG174 Low Loss (long dimensions not adapted to WLAN >5 GHz)

Versions

951-001-001	MIMO 3 SMAm 0,15	x 3	140/170/200 +30 mm	SMA male straight
951-001-002	MIMO 2 SMAm 0,15	x 2	140/200 +30 mm	SMA male straight

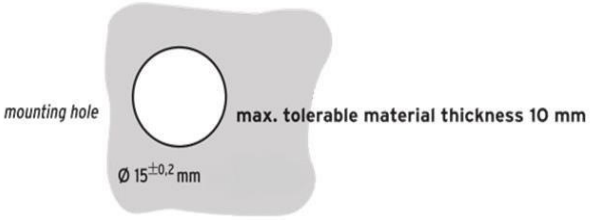
* dBi: referenced to an isotropic radiator

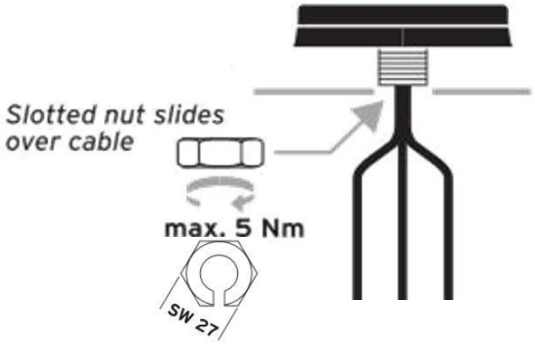
Technical drawings



Installation

- Take the necessary electrostatic precautions for a connection of electronic components (Potential ESD < 1 KV)
- Surface must be flat (maximum radius 1mm per meter), max thickness 10 mm
- No metallic (conductive) surface above the antenna
- Connectors are not waterproof, so area below the antenna must be dry
- Drill a hole (diameter 15 +4/-0,5mm) (clean with isopropyl alcohol or similar)
- Screw the nut on the grounding plate (Torque 5 Nm +0-20%)
- No adjunction of any material (silicones, glue, …)
- Check that the coaxial cable is not electrically charged (Potential ESD < 1 KV)
- Connect the coaxial cable connector by hand without forcing (Torque 1 +/- 0,15 Nm = handmade)
- Check that the wires respect the appropriate way, not pulled / stressed / bended < 25mm radius / touching aggressive parts





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