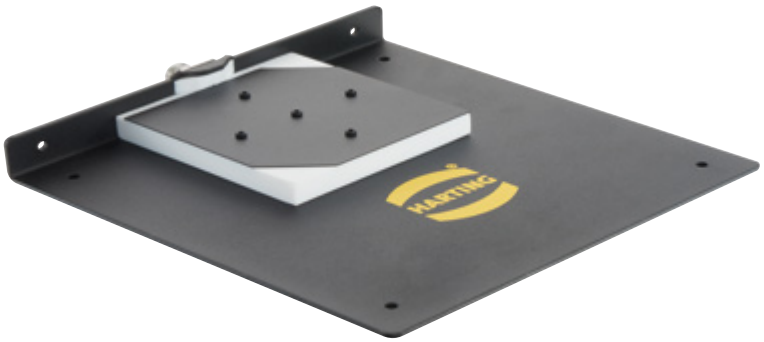
Ha-VIS RF-ANT-WR24



Ha-VIS RF-ANT-WR24
Panar RFID antenna

Advantages

- Designed for the harshest environments
- Circular UHF antenna
- Wide range antenna
- High temperature version available
- Railway version (under train installation) available

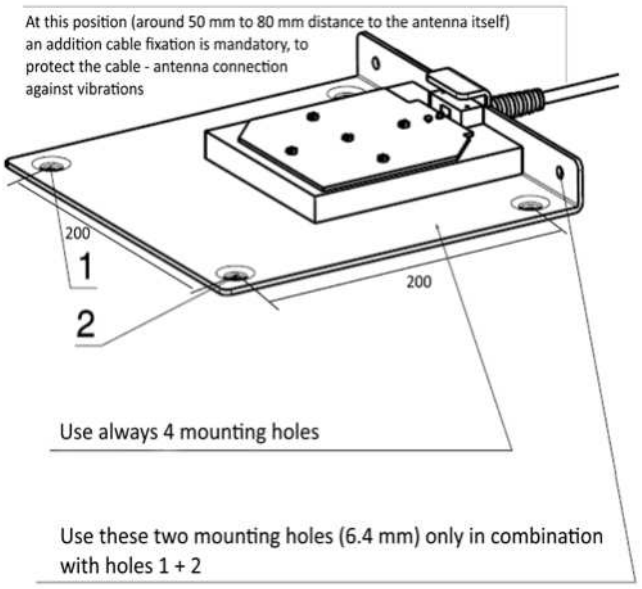
General description

This antenna family is designed to fulfill the toughest application requirements. High temperature, harsh industrial environment or even railway applications are in the focus of this antenna familiy.

It is very robust in design and has a wide opening angel up to 70°. Read ranges from 1 to 12 meters could be fulfilled in combination with HARTING UHF RFID readers and passive UHF transponders.

Identification	Part number
Ha-VIS RF-ANT-WR24	
Ha-VIS RF-ANT-WR24-i-EU (for harsh industrial applications)	20 93 201 0501
Ha-VIS RF-ANT-WR24-r-EU (for under the train applications)	20 93 201 0502
Ha-VIS RF-ANT-WR24-t-EU (for high temperature applications in industrial or railway applications)	20 93 201 0503
Ha-VIS RF-ANT-WR24-i-US	20 93 201 0504
Ha-VIS RF-ANT-WR24-r-US	20 93 201 0505
Ha-VIS RF-ANT-WR24-t-US	20 93 201 0506

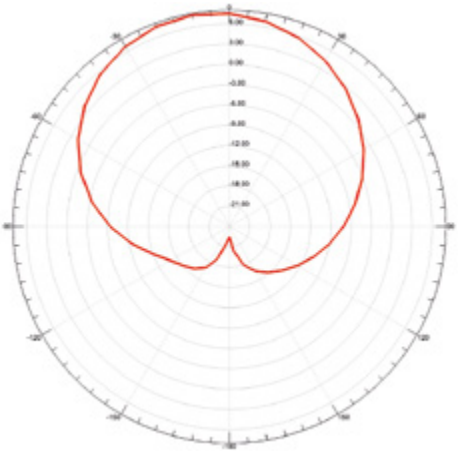
Drawing — Dimensions in mm



All data given are in line with the actual state of art and therefore not binding.
HARTING reserves the right to modify designs without giving the relevant reasons.

Technical characteristics

Electrical properties



Frequency range	EU: 865 – 868 MHz US: 902 – 928 MHz
Impedance	50 Ohm
Polarization	Circular (right)
Gain (EU: 868 MHz, US: 915 MHz)	8 dBic (WR24-r, WR24-t) 9 dBic (WR24-i)
Opening angle	70° (WR24-r, WR24-t) 67° (WR24-i)
Max. power (FCC 15.247)	4 W EIRP
Connection	WR24-i / WR24-t: N socket (female) WR24-r: direct coax cable (3 m) with SMA connector
Down tilt	≤ 10°

Mechanical properties

Dimension (W x H x D)	243 x 240 x 42 mm
Weight	2.4 kg (WR24-r) 1.1 kg (WR24-t)
Degree of protection	WR24-i: IP54 WR24-r: IP67 / IK08 WR24-t: IP64
Installation	Four 6.4 mm drill holes (ideal for M5/M6 hexagon head screw)
Operating temperature	WR24-i: -45 °C … +65 °C WR24-r: -40 °C … +85 °C WR24-t: -45 °C … +150 °C

Railway (rolling stock)

Fire protection	EN 45 545-2 (WR24-r, WR24-t)
Shock	EN 61 373 1B & 2 (WR24-r, WR24-t)
Vibration	EN 61 373 1B & 2 (WR24-r, WR24-t)
Salt mist	DIN EN 50 467:2012-10 (WR24-r, WR24-t) DIN EN 60 512-11-6:03 test 11f (WR24-r, WR24-t)
Ozone	DIN EN 50 467:2012-10, DIN ISO 1431-1:2011 method B (WR24-r, WR24-t)