

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

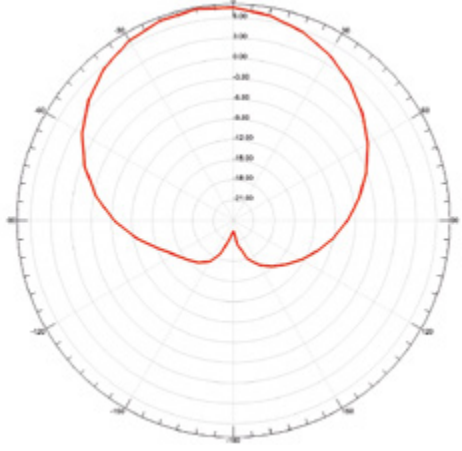
This antenna family is designed to fulfill the toughest application requirements. High temperature, harsh industrial environment or even railway applications are in the focus of this antenna family.

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	Drawing	Dimensions in mm
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		

Technical characteristics

Electrical properties

Frequency range	EU: 865 – 868 MHz US: 902 – 928 MHz	
Impedance	50 Ohm	
Polarization	Circular (right)	
Gain	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)