

Omnidirectional Antenna Vertical Polarization Indoor and outdoor use

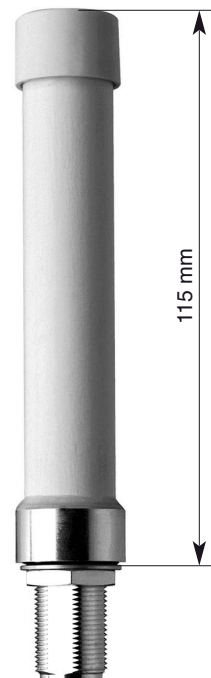
1710–2700

V

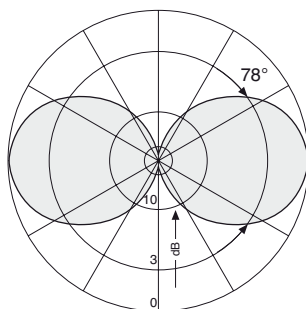
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Antennen · Electronic

VPol Omni 1710–2700 360° 2dBi

Type No.	800 10431
Input	N female
Connector position	Bottom or top
Frequency range	1710 – 2700 MHz
VSWR	< 1.8
Gain	2 dBi
Impedance	50 Ω
Intermodulation IM3 (2 x 43 dBm carrier)	< -150 dBc
Polarization	Vertical
Max. power	50 W (at 50 °C ambient temperature)
Weight	150 g
Radome diameter	20 mm
Height	115 mm



- Material: Radiator: Brass.
Radome: Fiberglass, colour: White.
- Mounting: One hole mounting (16 mm diameter) to surfaces of max. 10 mm thickness.
- Grounding: All metal parts of the antenna and the mounting kit are DC grounded. The inner conductor is not DC grounded.



Vertical Pattern

Omnidirectional Antenna Vertical Polarization

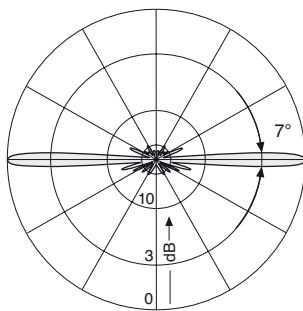
2500–2700

V

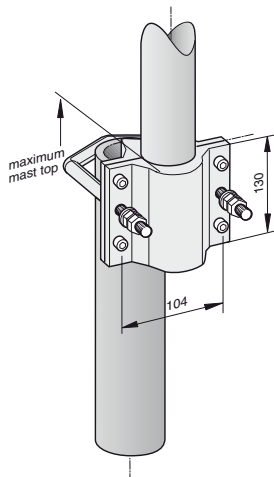
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VPol Omni 2500–2700 360° 11dBi 0°T

Type No.	800 10442
Frequency range	2500 – 2700 MHz
Polarization	Vertical
Gain	11 dBi
Impedance	50 Ω
VSWR	< 1.5
Intermodulation IM3 (2 x 43 dBm carrier)	< -150 dBc
Max. power	150 W (at 50 °C ambient temperature)



Vertical Pattern



Mechanical specifications

Input	7-16 female
Connector position	Bottom
Weight	4.5 kg
Radome diameter	51 mm
Wind load	110 N (at 150 km/h)
Max. wind velocity	200 km/h
Packing size	1232 x 148 x 112 mm
Height	1132 mm

Omnidirectional Antenna Vertical Polarization

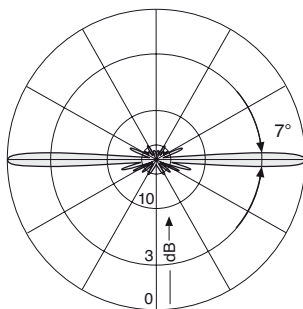
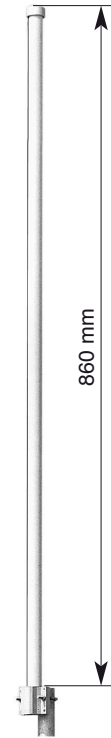
3400–3600

V

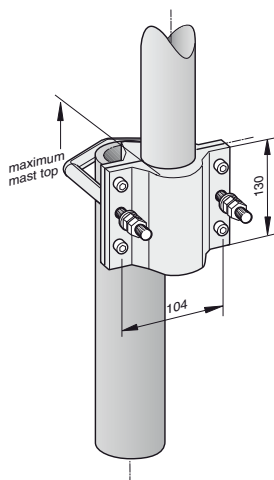
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VPol Omni 3400–3600 360° 11dBi 0°T

Type No.	800 10528
Frequency range	3400 – 3600 MHz
Polarization	Vertical
Gain	11 dBi
Impedance	50 Ω
VSWR	< 1.5
Intermodulation IM3 (2 x 43 dBm carrier)	< -150 dBc
Max. power	150 W (at 50 °C ambient temperature)



Vertical Pattern



Mechanical specifications

Input	7-16 female
Connector position	Bottom
Weight	4 kg
Radome diameter	51 mm
Wind load	110 N (at 150 km/h)
Max. wind velocity	200 km/h
Packing size	1043 x 148 x 112 mm
Height	860 mm

Vertical Polarization

Multi-band Directional

Type	Type No.	Frequency range	Connector female	Page
VPol BiDir 65° 5dBi	738 446	824–960/1710–2170	N	160
VPol Indoor 90° 7dBi	800 10465	806–960/1710–2700	N	161

Multi-band Omnidirectional

VPol Indoor 360° 2dBi	741 573	876–960/1710–2500	N	162
VPol Indoor 360° 2dBi	800 10430	1710–6000	N	163
VPol Indoor 360° 2dBi	800 10433	1710–6000	N	164
VPol Indoor 360° 2dBi	800 10137	876–960/1710–2500	N	165
VPol Indoor 360° 2dBi	800 10173	876–960/1710–2500	N	166
VPol Indoor 360° 2dBi	800 10249	806–960/1425–3800/5150–6000	N	167

Indoor / Outdoor – Single-band

VPol Omni 360° 2dBi	738 450	870–960	N	168
VPol Panel 90° 7.5dBi	736 854	872–960	N	169

Indoor / Outdoor – Dual-band / Multi-band

VPol Omni 360° 2dBi	738 454	1710–2200	N	170
VPol Omni 360° 2dBi	738 449	870–960/1710–1880	N	171
VPol Omni 360° 2dBi	800 10147	824–960/1805–2170	N	172

New Products

Multi-band Bidirectional Antenna

Vertical Polarization

Half-power Beam Width

824–960/1710–2170

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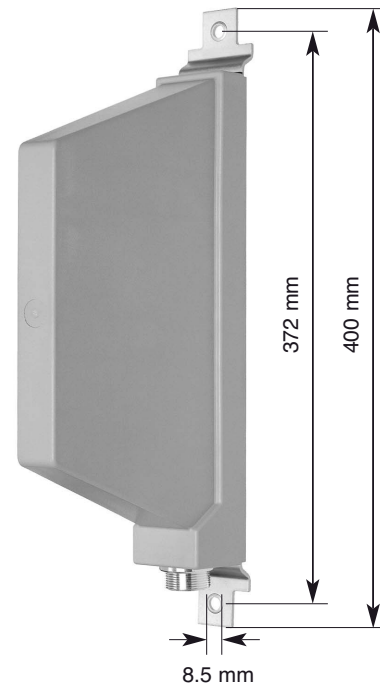
V

Antennen · Electronic

65°

VPol BiDir 824–960/1710–2170 65° 5dBi

Type No.	738 446
Input	1 x N female
Frequency range	824 – 960 MHz, 1710 – 2170 MHz
VSWR	< 1.5
Gain	824 – 960 MHz: 5 dBi 1710 – 1880 MHz: 5.5 dBi 1880 – 2170 MHz: 6.5 dBi
Impedance	50 Ω
Polarization	Vertical
Max. power (total)	200 W (at 50 °C ambient temperature)
Weight	0.8 kg
Wind load	Frontal: 25 N (at 150 km/h) Lateral: 65 N (at 150 km/h) Rearside: 35 N (at 150 km/h)
Max. wind velocity	200 km/h
Packing size	422 x 212 x 95 mm
Height/width/depth	310 / 55 / 190 mm

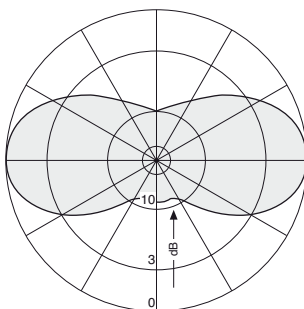


Material:
 Radiator: Tin plated copper.
 Reflector: Weather-proof aluminum.
 Radome: High impact plastic, colour: Grey.
 All screws and nuts: Stainless steel.

Mounting:
 Wall mounting: No additional mounting kit needed.
 For pipe mast mounting use clamps listed on the datasheet (order separately).

Ice protection:
 The radiating system is protected by the radome.
 Due to its very sturdy construction, the antenna remains operational even under icy conditions.

Grounding:
 All metal parts of the antenna as well as the inner conductor are DC grounded.



Typical Horizontal Pattern

**Indoor Multi-band
Directional Antenna
Vertical Polarization
Half-power Beam Width
Integrated Combiner**

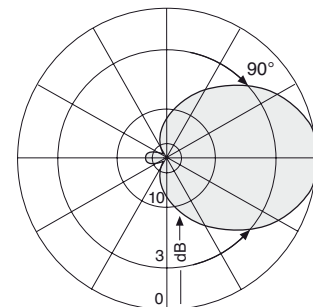
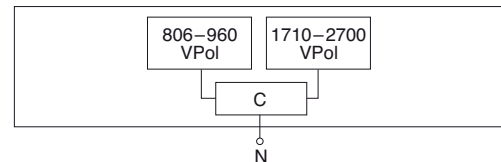
806–960 1710–2700
V V
90° 90°
C

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Preliminary Issue

VVPol Indoor 806–960/1710–2700 C 90° 7dBi

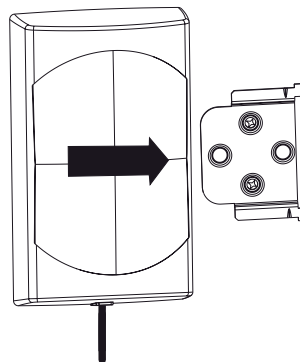
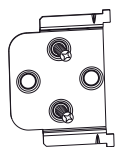
Type No.	800 10465
Frequency range	806 – 960 MHz / 1710 – 2700 MHz
Polarization	Vertical
Gain	Approx. 7 dBi
Half-power beam width	Horizontal: Approx. 90°
Impedance	50 Ω
VSWR	806 – 960 MHz: < 2.0 1710 – 2200 MHz: < 2.0 2200 – 2400 MHz: < 2.5 2400 – 2700 MHz: < 2.0
Max. power	50 W (at 50 °C ambient temperature)
Input	Cable RG 223/CU of 1m length, white, with N female connector
Protection class	IP 30
Weight	500 g
Packing size	363 x 152 x 62 mm
Height/width/depth	231 / 140 / 50 mm

- Material:** Reflector: Aluminum.
Radome: High impact polystyrol, colour: White.
Additional painting is possible.
Mounting plates: Stainless steel.
- Mounting:** Two holes of 6 mm diameter in the mounting plate.
Screws are not supplied.
Avoid to stress the cable.
- Grounding:** All metal parts inclusive the inner conductor are DC grounded.
- Available accessories:** Broadband power splitters and tappers (800 – 2700 MHz).

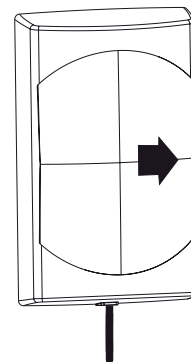


Horizontal Pattern

Mounting:



Align the antenna over the attachment plate.



Pull the antenna to the stop.

Mount the attachment plate to the wall using two screws of 4 mm diameter in the position as indicated.

Indoor Omnidirectional Antenna

Vertical Polarization

Multi-band

1710–2500

V

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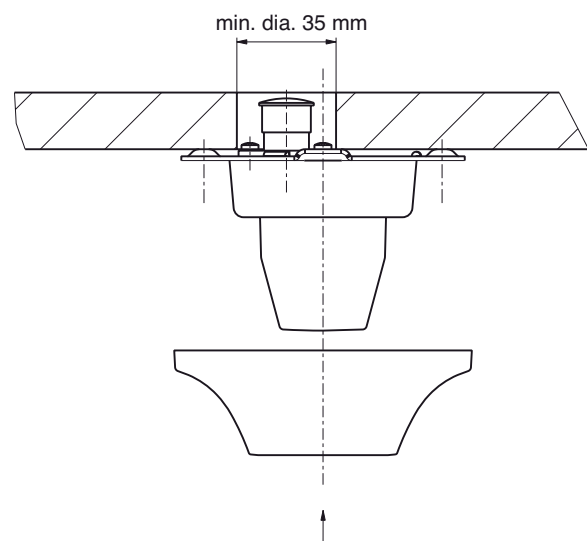
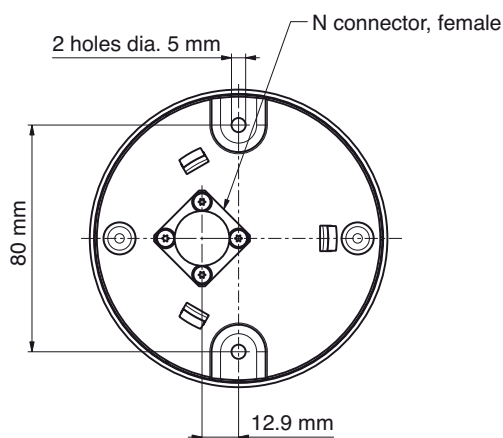
- The antenna can be operated in the total frequency range simultaneously.
- The antenna needs no additional groundplane.

VPol Indoor 1710–2500 360° 2dBi

Type No.	741 573
Frequency range	1710 – 2500 MHz
VSWR	1710 – 1880 MHz: < 1.6 1850 – 1990 MHz: < 1.6 1920 – 2170 MHz: < 1.6 2170 – 2500 MHz: < 2.0
Input	1 x N female
Gain	2 dBi
Impedance	50 Ω
Polarization	Vertical
Max. power (per band)	50 W (at 50 °C ambient temperature)
Weight	150 g
Diameter	100 mm
Height	50 mm (without connector)



- Material:** Base: Aluminum.
Protective housing: High impact polystyrol, colour: White.
Additional painting is possible.
- Mounting:** Holes in the base enable a mounting on the ceiling. Screws are supplied.
For the N connector a hole in the ceiling with a diameter of 35 mm is required.
- Grounding:** All metal parts including the inner conductor are DC grounded.
- Available accessories:** Broadband power splitters and tappers (800 – 2500 MHz).



Clip the protective housing into position after the antenna has been mounted with the help of the three supplied screws.

Indoor Omnidirectional Antenna Vertical Polarization Multi-band

1710–6000

V

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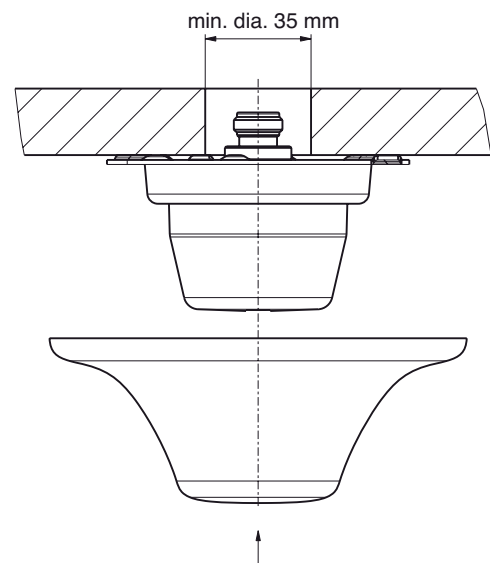
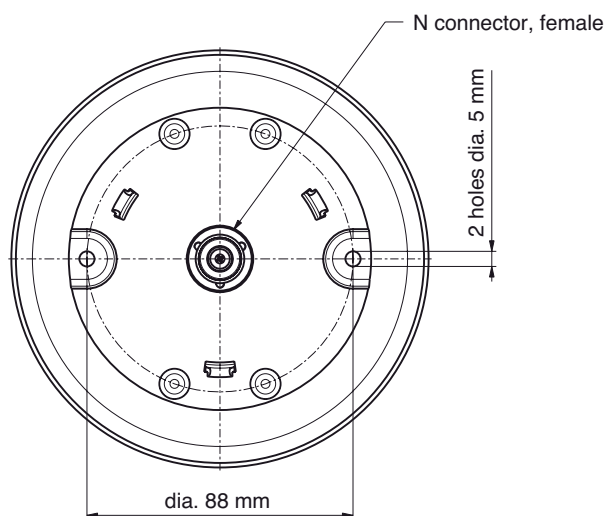
- The antenna can be operated in all frequency ranges simultaneously.
- The antenna needs no additional groundplane.

VPol Indoor 1710–6000 360° 2dBi

Type No.	800 10430
Frequency range	1710 – 6000 MHz
Polarization	Vertical
Gain	2 dBi
Impedance	50 Ω
VSWR	< 1.5
Max. power	50 W (at 50 °C ambient temperature)
Input	1 x N female
Weight	133 g
Diameter	138 mm
Height	56 mm (without connector)



- Material:** Base: Aluminum.
Protective housing: High impact polystyrol, colour: White.
Additional painting is possible.
- Mounting:** Holes in the base enable a mounting on the ceiling. Screws are supplied.
For the N connector a hole in the ceiling with a diameter of 35 mm is required.
- Available accessories:** Broadband power splitters and tappers (800 – 2500 MHz).



Clip the protective housing into position after the antenna has been mounted with the help of two supplied screws.

Indoor Directional Antenna Vertical Polarization Half-power Beam Width

3300–3800

V

90°

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Preliminary Issue

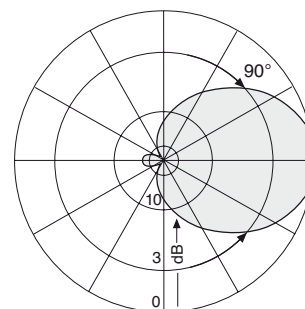
VPol Indoor 3300–3800 90° 7dBi

Type No.	800 10433
Frequency range	3300 – 3800 MHz
Polarization	Vertical
Gain	Approx. 7 dBi
Half-power beam width	Horizontal: Approx. 90°
Impedance	50 Ω
VSWR	< 2.0
Max. power	50 W (at 50 °C ambient temperature)
Input	Cable of 1 m length with SMA female connector
Diameter / depth	111 x 23 mm

Material: Radome: High impact polystyrol, colour: White. Additional painting is possible. Mounting plates: Stainless steel.

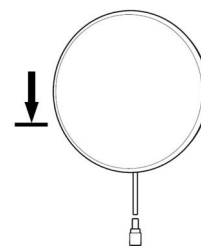
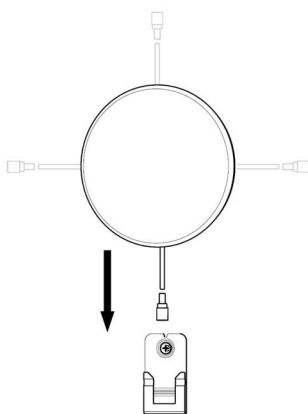
Mounting: One hole of 6 mm diameter in the mounting plate. Screws are not supplied. Avoid stressing the cable.

Cable: Minimum bending radius: Single bending 10 mm, repeated bending 20 mm.



Horizontal Pattern

Mounting:



Attach the mounting plate to the wall using one screw of 6 mm diameter in the position as indicated.

Align the antenna over the mounting plate. Antenna can be mounted in 90 degree steps as indicated.

Pull the antenna to the stop.

Indoor Multi-band Omni Antenna Vertical Polarization

876–960

1710–2500

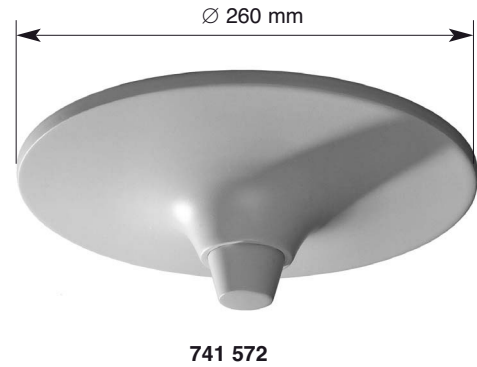
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V

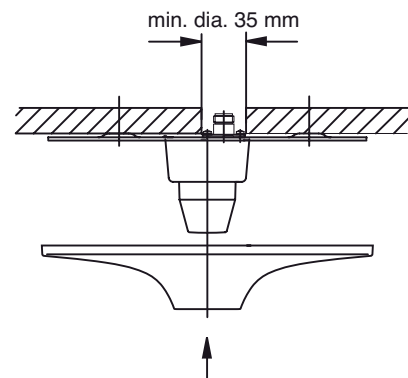
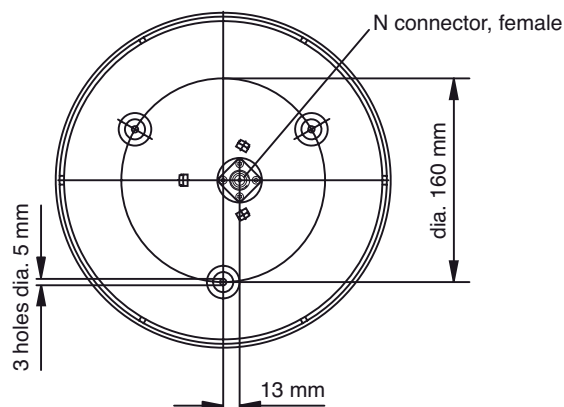
- The antenna can be operated in all frequency ranges simultaneously.
- The antennas need no additional groundplane.

VPol Indoor 876–960/1710–2500 360° 2dBi

Type No.	800 10137
Frequency range	876 – 960 MHz 1710 – 2500 MHz
VSWR	< 1.9: 876 – 890 MHz < 1.6: 890 – 960 MHz < 1.6: 1710 – 2170 MHz < 2.0: 2170 – 2500 MHz
Input	1 x N female
Gain	2 dBi
Impedance	50 Ω
Polarization	Vertical
Max. power (per band)	50 W (at 50 °C ambient temperature)
Weight	300 g
Diameter	210 mm
Height	78 mm (without connector)



- Material:** Base: Aluminum.
Protective housing: High impact polystyrol,
colour: White.
Additional painting is possible.
- Mounting:** Three holes in the base enable a mounting on the ceiling. Two types of screws are supplied. For the N connector a hole in the ceiling with a diameter of 35 mm is required.
- Grounding:** All metal parts including the inner conductor are DC grounded.
- Available accessories:** Broadband power splitters and tappers (800 – 2500 MHz).



Clip the protective housing into position after the antenna has been mounted with the help of the three supplied screws.

Indoor Multi-band Omni Antenna Vertical Polarization

876–960 1710–2500

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Antennen · Electronic

V

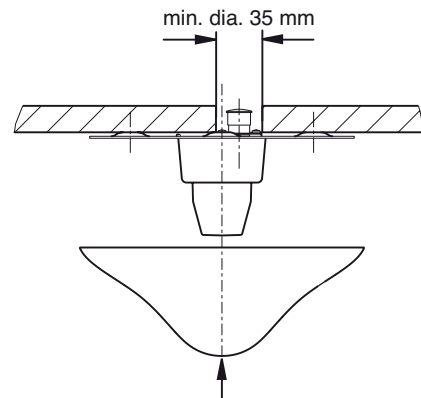
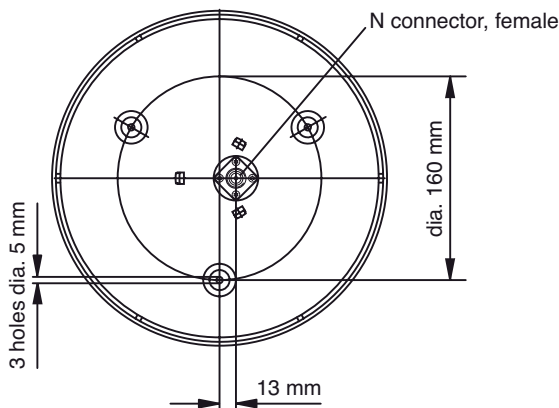
- The antenna needs no additional groundplane.

VPol Indoor 876–960/1710–2500 360° 2dBi

Type No.	800 10173
Frequency range	876 – 960 MHz 1710 – 2500 MHz
Polarization	Vertical
Gain	2 dBi
Impedance	50 Ω
VSWR	876 – 890 MHz: < 1.8 890 – 960 MHz: < 1.6 1710 – 2170 MHz: < 1.6 2170 – 2500 MHz: < 2.0
Max. power (per band)	50 W (at 50 °C ambient temperature)
Input	1 x N female
Weight	340 g
Diameter	215 mm
Height	85 mm (without connector)



- Material:** Base: Aluminum.
Protective housing: High impact polystyrol, colour: White.
Additional painting is possible.
- Mounting:** Three holes in the base enable a mounting on the ceiling. Two types of screws are supplied. For the N connector a hole in the ceiling with a diameter of 35 mm is required.
- Grounding:** All metal parts including the inner conductor are DC grounded.
- Available accessories:** Broadband power splitters and tappers (800 – 2500 MHz).



Clip the protective housing into position after the antenna has been mounted with the help of the three supplied screws.

Indoor Multi-band Omni Antenna Vertical Polarization

806–960

1425–3800

5150–6000

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V

- The antenna can be operated in all frequency ranges simultaneously.
- The antennas need no additional groundplane.

VPol Indoor 806–960/1425–3800/5150–6000 360° 2dBi

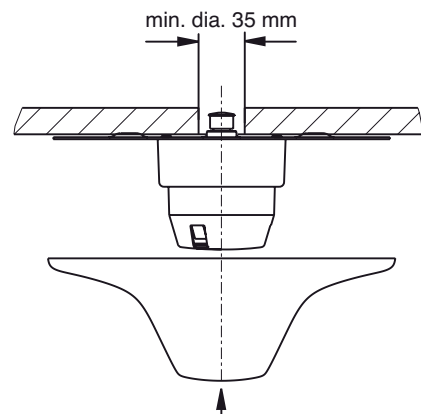
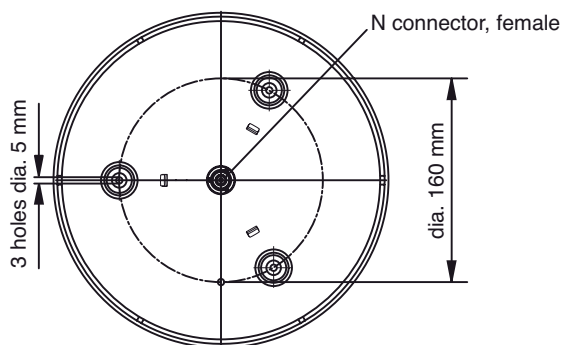
Type No.	800 10249
Frequency range	806 – 960 MHz 1425 – 3800 MHz 5150 – 6000 MHz
Polarization	Vertical
Gain	≈ 2 dBi
Impedance	50 Ω
VSWR	806 – 960 MHz: < 1.5 1425 – 1710 MHz: < 2.0 1710 – 2200 MHz: < 1.4 2200 – 3800 MHz: < 1.6 5150 – 6000 MHz: < 2.0
Max. power	50 W (at 50 °C ambient temperature)
Input	1 x N female
Protection class	IP 30
Weight	466 g
Packing size	277 x 277 x 169 mm
Diameter	258 mm
Height	94 mm (without connector)



Material: Reflector: Aluminum.
Radome: High impact polystyrol, colour: White.
Additional painting is possible.

Mounting: Three holes in the base enable a mounting on the ceiling. Two types of screws are supplied. For the N connector a hole in the ceiling with a diameter of 35 mm is required.

Available accessories: Broadband power splitters and tappers (800 – 2500 MHz).



Clip the protective housing into position after the antenna has been mounted with the help of the three supplied screws.

Omnidirectional Antenna Vertical Polarization Indoor and outdoor use

870–960

V

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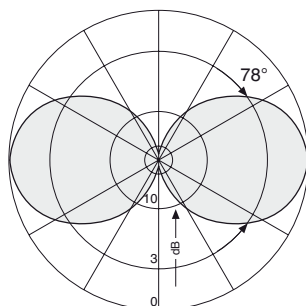
VPol Omni 870–960 360° 2dBi

Type No.	738 450
Input	N female
Connector position	Bottom or top
Frequency range	870 – 960 MHz
VSWR	< 1.5
Gain	2 dBi
Impedance	50 Ω
Intermodulation IM3 (2 x 43 dBm carrier)	< -150 dBc
Polarization	Vertical
Max. power	100 W (at 50 °C ambient temperature)
Weight	200 g
Radome diameter	20 mm
Height	180 mm

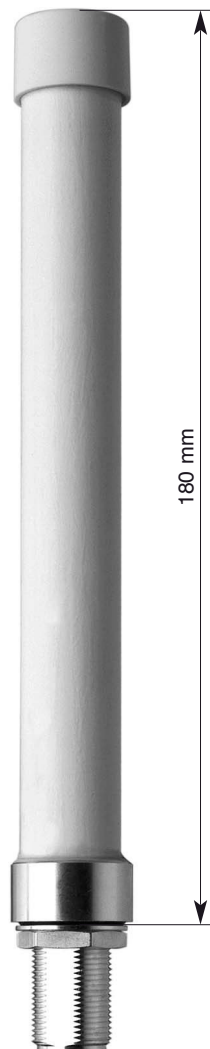
Material: Radiator: Brass.
Radome: Fiberglass, colour: White.

Mounting: One hole mounting (16 mm diameter) to surfaces of max. 10 mm thickness.

Grounding: All metal parts of the antenna as well as the inner conductor and the mounting kit are DC grounded.



Vertical Pattern



Panel
Vertical Polarization
Half-power Beam Width

872–960

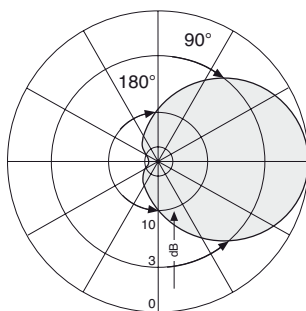
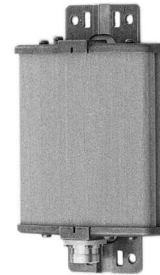
V

90°

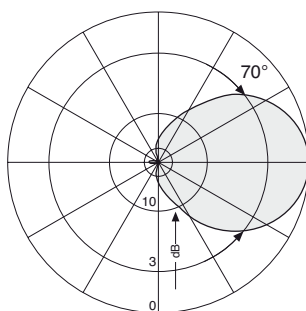
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VPol Panel 872–960 90° 7.5dBi

Type No.	736 854
Frequency range	872 – 960 MHz
Polarization	Vertical
Gain	7.5 dBi
Half-power beam width	H-plane: 90° E-plane: 70°
Front-to-back ratio	> 20 dB
Impedance	50 Ω
VSWR	< 1.5
Intermodulation IM3 (2 x 43 dBm carrier)	< -140 dBc
Max. power	350 W (at 50 °C ambient temperature)



Horizontal Pattern



Vertical Pattern

Mechanical specifications

Input	N female
Connector position*	Bottom or top
Weight	1.5 kg
Wind load	Frontal: 45 N (at 150 km/h) Lateral: 20 N (at 150 km/h) Rearside: 60 N (at 150 km/h)
Max. wind velocity	200 km/h
Packing size	369 x 172 x 72 mm
Height/width/depth	262 / 155 / 49 mm

* Inverted mounting:
 Connector position top: Change drain hole screw.

Omnidirectional Antenna Vertical Polarization Indoor and outdoor use

1710–2200

V

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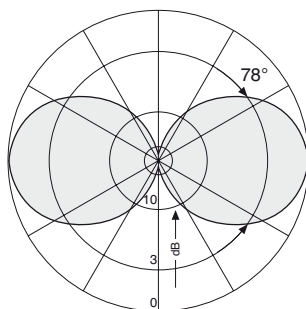
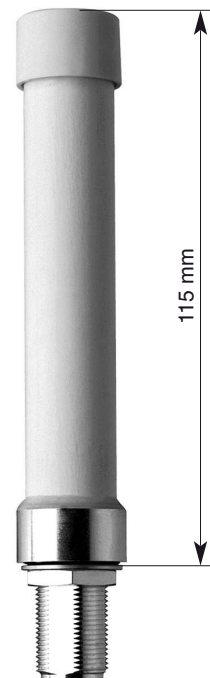
VPol Omni 1710–2200 360° 2dBi

Type No.	738 454
Input	N female
Connector position	Bottom or top
Frequency range	1710 – 2200 MHz
VSWR	1710 – 2170 MHz: < 1.5 2170 – 2200 MHz: < 1.8
Gain	2 dBi
Impedance	50 Ω
Intermodulation IM3 (2 x 43 dBm carrier)	< -150 dBc
Polarization	Vertical
Max. power	50 W (at 50 °C ambient temperature)
Weight	150 g
Radome diameter	20 mm
Height	115 mm

Material: Radiator: Brass.
Radome: Fiberglass, colour: White.

Mounting: One hole mounting (16 mm diameter) to surfaces of max. 10 mm thickness.

Grounding: All metal parts of the antenna and the mounting kit are DC grounded. The inner conductor is not DC grounded.



Vertical Pattern

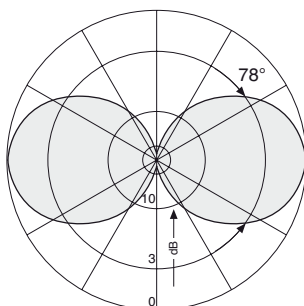
Dual-band Omni Antenna 870–960/1710–1880 Vertical Polarization V Indoor and outdoor use

VPol Omni 870–960/1710–1880 360° 2dBi

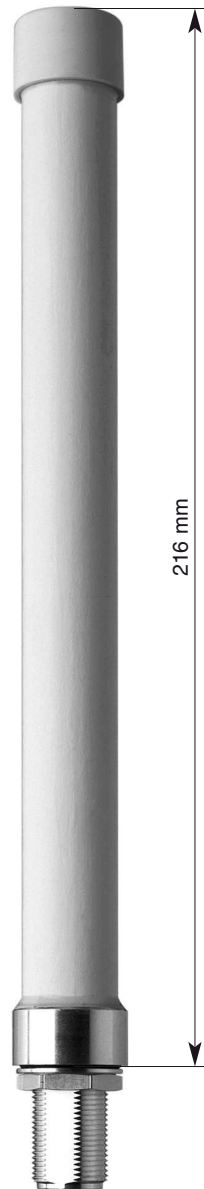
Type No.	738 449
Input	1 x N female
Connector position	Bottom or top
Frequency range	870 – 960 MHz / 1710 – 1880 MHz
VSWR	< 1.7
Gain	2 dBi
Impedance	50 Ω
Intermodulation IM3 (2 x 43 dBm carrier)	< -150 dBc
Polarization	Vertical
Max. power	50 W: 870 – 960 MHz 50 W: 1710 – 1880 MHz (at 50 °C ambient temperature)
Weight	250 g
Radome diameter	20 mm
Height	216 mm

Material: Radiator: Brass.
Radome: Fiberglass, colour: White.

Mounting: One hole mounting (16 mm diameter) to surfaces of max. 10 mm thickness.



Vertical Pattern



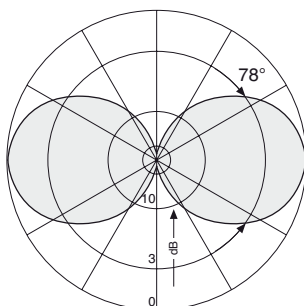
Dual-band Omni Antenna 824–960/1805–2170 Vertical Polarization V Indoor and outdoor use

KATHREIN
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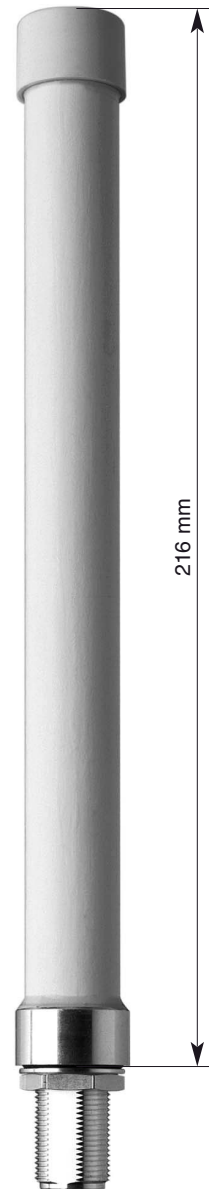
VPol Omni 824–960/1805–2170 360° 2dBi

Type No.	800 10147
Input	1 x N female
Connector position	Bottom or top
Frequency range	824 – 960 MHz / 1805 – 2170 MHz
VSWR	< 2.0
Gain	2 dBi
Impedance	50 Ω
Polarization	Vertical
Max. power	50 Watt: 824 – 960 MHz 50 Watt: 1805 – 2170 MHz (at 50 °C ambient temperature)
Weight	250 g
Radome diameter	20 mm
Height	216 mm

- Material:** Radiator: Brass.
Radome: Fiberglass, colour: White.
- Mounting:** One hole mounting (16 mm diameter) to surfaces of max. 10 mm thickness.
- Grounding:** All metal parts of the antenna as well as the inner conductor and the mounting kit are DC grounded.



Vertical Pattern



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New Products