

## Summary – Indoor Antennas Vertical Polarization

### Indoor Omnidirectional Antennas – Single-band

Type	Type No.	Height [mm]	Input	Page	
VPol Omni	370–430 360° 2dBi	737003	552	N female	66
VPol Omni	380–405 360° 2dBi	80010277	77	N female	67
VPol Omni	405–430 360° 2dBi	80010339	77	N female	67
VPol Indoor	406–430 360° 2dBi	737299	400	cable termination	68
VPol Omni	406–470 360° 2dBi	K751121	510	N female	69
VPol Omni	450–470 360° 2dBi	<b>80010632</b>	77	N female	67
VPol Indoor	450–470 360° 2dBi	736831	360	cable termination	70

### Indoor Directional Antennas – Single-band

Type	Type No.	Height [mm]	Input	Page	
VPol Indoor	380–405 90° 7dBi	80010278	302	N female	71
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VPol Indoor	440–470 90° 7dBi	<b>80010633</b>	302	N female	71

**New Products**

# Omnidirectional Antenna Vertical Polarization

370–430

V

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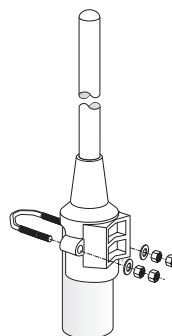
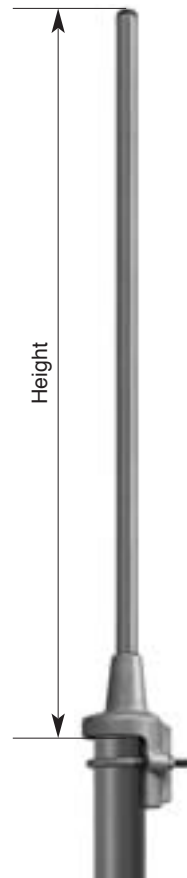
## VPol Omni 370–430 360° 2dBi

Type No.	<b>737003</b>
Frequency range	370 – 430 MHz
Polarization	Vertical
Gain	2 dBi
Impedance	50 Ω
VSWR	< 1.5
Intermodulation IM3	< -150 dBc (2 x 37 dBm carrier)
Max. power	100 W (at 50 °C ambient temperature)

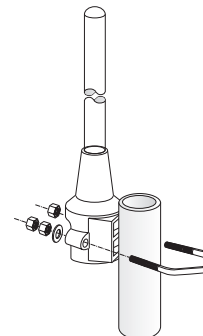
**Material:**  
 Radiator: Brass.  
 Radome: Fiberglass, dia. 21 mm, colour: Grey.  
 Base: Aluminum.  
 Mounting U-bolt and all screws and nuts:  
 Stainless steel.

**Mounting:**  
 The antenna can be attached in two ways with the supplied mounting kit:  
 1. On the tip of any tubular mast of 40 – 54 mm dia. (connecting cable runs inside the mast).  
 2. Laterally at the tip of any tubular mast of 20 – 54 mm dia. (connecting cable runs outside the mast).

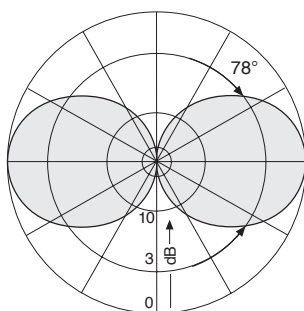
**Grounding:**  
 All metal parts of the antenna including the inner conductor are DC grounded.



On the tip of a tubular mast



Laterally at the tip of a tubular mast



Vertical Pattern

Mechanical specifications	
Input	N female
Connector position	Bottom
Weight	1.0 kg
Radome diameter	21 mm
Wind load	20 N (at 150 km/h)
Max. wind velocity	200 km/h
Packing size	112 x 97 x 654 mm
Height	555 mm

# Indoor Omnidirectional Antennas Vertical Polarization

380...470

V

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- The antennas need no additional groundplane.

**80010277: VPol Indoor 380–405 360° 2dBi**

**80010339: VPol Indoor 405–430 360° 2dBi**

**80010632: VPol Indoor 450–470 360° 2dBi**

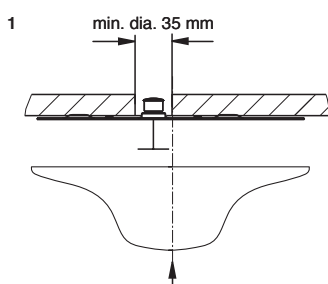
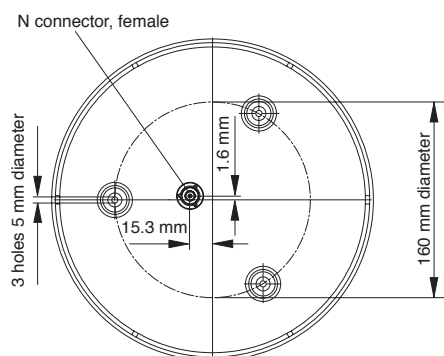
Type No.	80010277	80010339	80010632
Frequency range	380 – 405 MHz	405 – 430 MHz	450 – 470 MHz
Polarization	Vertical	Vertical	Vertical
Gain	Approx. 2 dBi	Approx. 2 dBi	Approx. 2 dBi
Impedance	50 Ω	50 Ω	50 Ω
VSWR	< 2.0	< 2.0	< 2.0
Max. power	50 W (at 50 °C ambient temperature)		
Input	1 x N female		
Protection class	IP 30		
Weight	429 g		
Packing size	267 x 267 x 114 mm		
Diameter	258 mm		
Height	77 mm (without connector)		

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

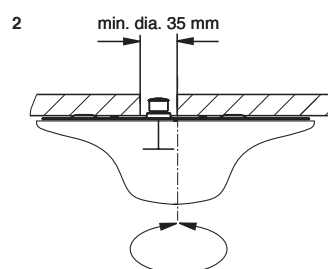
**Mounting:** Three holes in the base enable a mounting on the ceiling. Two types of screws are supplied. For the N connector a hole in the ceiling with a diameter of 35 mm is required.

**Grounding:** All metal parts including the inner conductor are DC grounded.

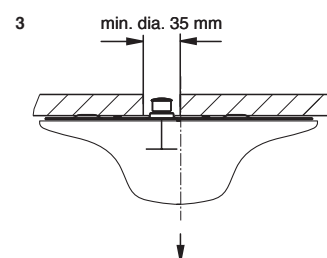
**Available accessories:** Power splitters (380 – 512 MHz)



Press radome against installed reflector.



Rotate radome until it locks in place.



Pull downwards to remove radome.

# Indoor Omnidirectional Antenna Vertical Polarization

406–430

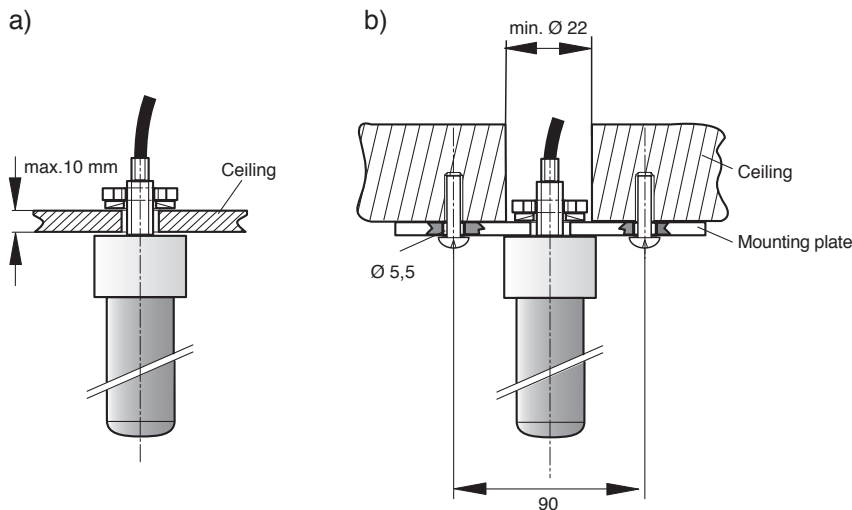
V

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## VPol Indoor 406–430 360° 2dBi

Type No.	<b>737299</b>
Frequency range	406 – 430 MHz
Polarization	Vertical
Gain	2 dBi
Impedance	50 Ω
VSWR	< 1.5
Max. power	50 W (at 50 °C ambient temperature)

- Material:** Dipole: Brass.  
Radome: Fiberglass, colour: White.  
Additional mounting plate: Aluminum.
- Mounting:** a) Single-hole mounting (12 mm diameter) on surface of up to 10 mm thickness.  
b) On surfaces of more than 10 mm thickness, by means of mounting plate included in the scope of delivery.
- Grounding:** All metal parts of the antenna including the inner conductor are DC grounded.



### Mechanical specifications

Input	Cable RG 58/CU of 1 m length, grey, connector is not supplied
Weight	0.25 kg
Radome diameter	20 mm
Mounting plate	115 x 25 mm
Packing size	Foil: 650 x 130 mm
Height	400 mm

# Omnidirectional Antennas Vertical Polarization

406–470

V

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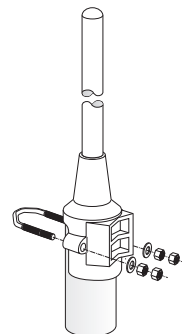
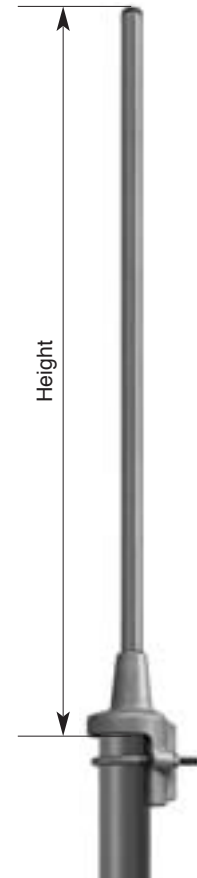
### VPol Omni 406–470 360° 2dBi

Type No.	<b>K751121</b>
Frequency range	406 – 470 MHz
Polarization	Vertical
Gain	2 dBi
Impedance	50 Ω
VSWR	< 1.5
Intermodulation IM3	< -150 dBc (2 x 37 dBm carrier)
Max. power	100 W (at 50 °C ambient temperature)

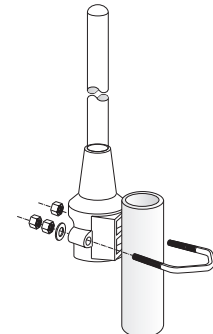
**Material:**  
 Radiator: Brass.  
 Radome: Fiberglass, dia. 21 mm, colour: Grey.  
 Base: Aluminum.  
 Mounting U-bolt and all screws and nuts:  
 Stainless steel.

**Mounting:**  
 The antenna can be attached in two ways with the supplied mounting kit:  
 1. On the tip of any tubular mast of 40 – 54 mm dia. (connecting cable runs inside the mast).  
 2. Laterally at the tip of any tubular mast of 20 – 54 mm dia. (connecting cable runs outside the mast).

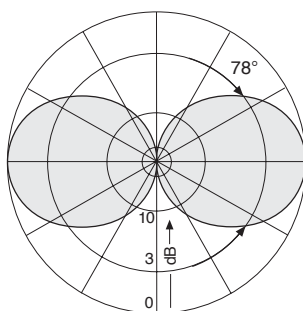
**Grounding:**  
 All metal parts of the antenna including the inner conductor are DC grounded.



On the tip of a tubular mast



Laterally at the tip of a tubular mast



Vertical Pattern

#### Mechanical specifications

Input	N female
Connector position	Bottom
Weight	0.8 kg
Radome diameter	21 mm
Wind load	20 N (at 150 km/h)
Max. wind velocity	200 km/h
Packing size	112 x 97 x 614 mm
Height	515 mm

Indoor  
370 – 470 MHz

# Indoor Omnidirectional Antenna Vertical Polarization

450–470

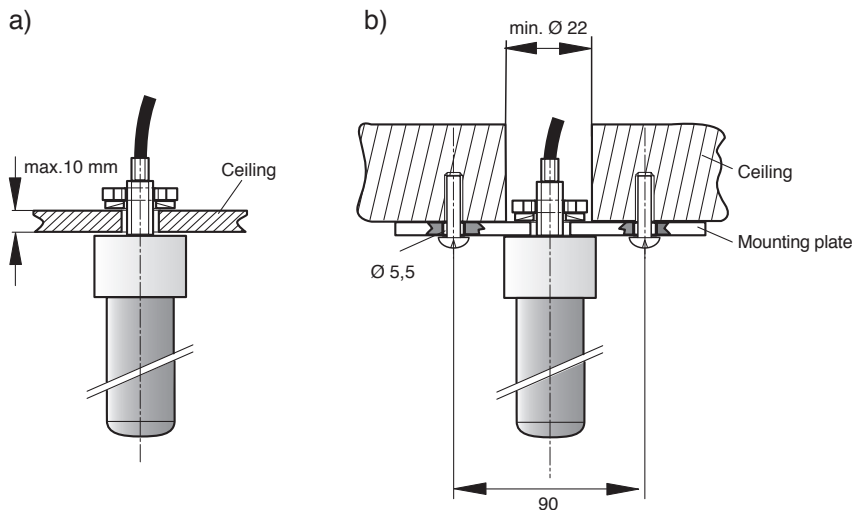
V

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## VPol Indoor 450–470 360° 2dBi

Type No.	<b>736831</b>
Frequency range	450 – 470 MHz
Polarization	Vertical
Gain	2 dBi
Impedance	50 Ω
VSWR	< 1.5
Max. power	50 W (at 50 °C ambient temperature)

- Material:** Dipole: Brass.  
Radome: Fiberglass, colour: White.  
Additional mounting plate: Aluminum.
- Mounting:** a) Single-hole mounting (12 mm diameter) on surface of up to 10 mm thickness.  
b) On surfaces of more than 10 mm thickness, by means of mounting plate included in the scope of delivery.
- Grounding:** All metal parts of the antenna including the inner conductor are DC grounded.



### Mechanical specifications

Input	Cable RG 58/CU of 1 m length, grey, connector is not supplied
Weight	0.23 kg
Radome diameter	20 mm
Mounting plate	115 x 25 mm
Packing size	Foil: 650 x 130 mm
Height	360 mm

**Indoor Directional Antenna  
Vertical Polarization  
Half-power Beam Width**

380... 470

V

90°

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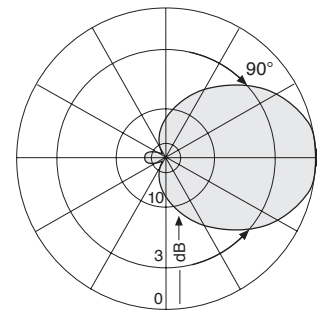
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**80010278: VPol Indoor 380–405 90° 7dBi**  
**80010330: VPol Indoor 405–430 90° 7dBi**  
**80010633: VPol Indoor 450–470 90° 7dBi**

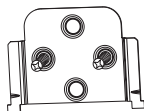
Type No.	80010278	80010330	80010633
Frequency range	380 – 405 MHz	405 – 430 MHz	450 – 470 MHz
Polarization	Vertical	Vertical	Vertical
Gain	Approx. 7 dBi	Approx. 7 dBi	Approx. 7 dBi
Half-power beam width	Horizontal: Approx. 90°	Horizontal: Approx. 90°	Horizontal: Approx. 90°
Impedance	50 Ω	50 Ω	50 Ω
VSWR	< 2.0	< 2.0	< 2.0
Max. power	50 W (at 50 °C ambient temperature)		
Input	N female connector		
Protection class	IP 30		
Weight	1390 g		
Packing size	315 x 252 x 62 mm		
Height/width/depth	302 x 243 x 50 mm		



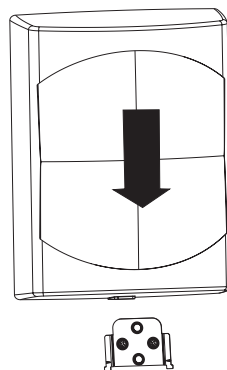
- Material:** Reflector: Copper.  
Radome: High impact polystyrol, colour: White.  
Additional painting is possible.  
Mounting plates: Stainless steel.
- Mounting:** Two holes of 6 mm diameter in the mounting plate.  
Screws are not supplied
- Grounding:** All metal parts inclusive the inner conductor are DC grounded.
- Available accessories:** Power splitters (380 – 512 MHz)



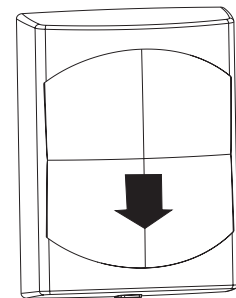
**Mounting:**



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



Align the antenna over the attachment plate.



Pull the antenna down to the stop.

Indoor  
370 – 470 MHz