

Antenna Overview

Version 3.8
2018/11/19



Contents

ANT-RSMA-Omni Set Order No.: 5510000397	3
Antenna-Kit II WOx003n Order No.: 5520000145	4
ANT-Omni-vehicle-1.2m Order No.: 600519	4
ANT-Omni-5-2G-1.2m Order No.: 600518.....	6
ANT-Omni-8-Dual Order No.: 5510000234	7
ANT-N-11-5G-dualpol for 802.11ac/n Bridge Links Order number: 5500001542	8
ANT-N-20-5G-dualpol for 802.11ac/n Bridge Links Order number: 5500000551.....	9
ANT-N-D-13/15-dual Order No.: 600513	10
ACC-EMP-N-dual Order No.: 600499.....	11
Low-Loss antenna cables.....	12

ANT-RSMA-Omni Set Order No.: 5510000397

Description :

This antenna features omni directional radiation and has a gain of 5 dBi und fits perfect to Access Point and WLAN router there installed at unfavorable places. The cable with 1,5 m length allows the direct connection to devices with RSMA plug, i.e. W2022ac-ext, WI1003n, W2003ac-ext, be-ip, RS-Serie.

The magnetic base has 60 mm diameter and simplified placement at a suitable location. For optimizing the radiation the antenna can be bend up to 90°. We ship this antenna in set of two antennas, perfect for 802.11n devices with to antenna connectors.

Features:

Item	ANT-RSMA-Omni Set
Order No.	5510000397
Frequency band	2400 MHz –2500 MHz
Polarization	Linear vertical, omni
Gain	5dB without cable, include cable approx. 2-3 dBi
Cable lenght	1,5 m
Cable	RG-174 (high flexible)
Connector	RSMA socket
Stand	60 mm diameter with magnet base
Total height	216 mm, in bended state approx. 64 mm
Color	Black



Antenna-Kit II WOx003n Order No.: 5520000145

Description :

This antenna features omni directional radiation and has a gain of 2 dBi. The antenna is fitted with a N-plug connector and can without any adaptor cable directly mounted at a Outdoor Access Point WO1003ac / WO2003ac/. The antenna has the protection class IP65 (waterproof) and can therefore be used indoor and outdoor.

We ship this antenna in a set of two antennas.

Features:

Item	Antenna-Kit II WOx003n
Order No.	5520000145
Frequency band	2400 MHz –2500 MHz / 4900 MHZ -5900 MHZ
Polarization	Linear vertical, omni
Gain	Approx. 2 dB
Connector	N-plug
Total height	142 mm, in bended state approx. 112mm
Color	White



ANT-Omni-vehicle-1.2m

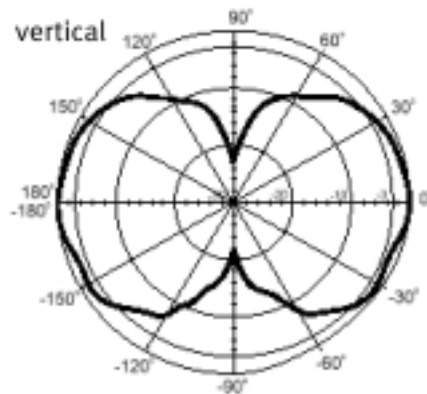
Order No.: 600519

Description:

This antenna features omni directional radiation and has a gain of 5 dBi. It is particularly suitable for vehicle mounting. Using its 1.2 m cable, it can be connected directly. If required, the cable can be extended with optionally available RTNC cables. With the help of an adapter to RSMA, this antenna can also be operated at devices with RSMA jack. For optimum operation, this antenna requires a metallic surface of at least 40 cm x 40 cm, such as a vehicle roof. This antenna is waterproof and can therefore be used both indoors and outdoors.

Features:

Item	ANT-Omni-vehicle-1.2m
Order No.	600519
Frequency band	2400 MHz –2500 MHz
Polarization	Linear, vertical
VSWR	< 1.5
Gain	4 dBi (cable loss included)
Cable length	1.2 m
Connector	RTNC plug
Hole diameter	12mm
Height	95mm
Depth	Approx. 15mm
Color	Black



ANT-Omni-5-2G-1.2m

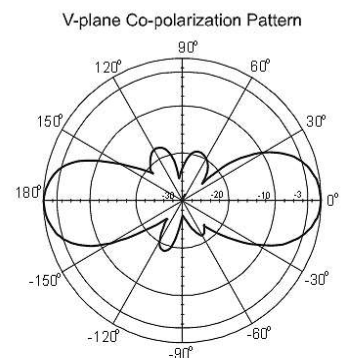
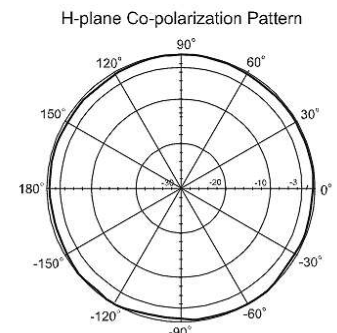
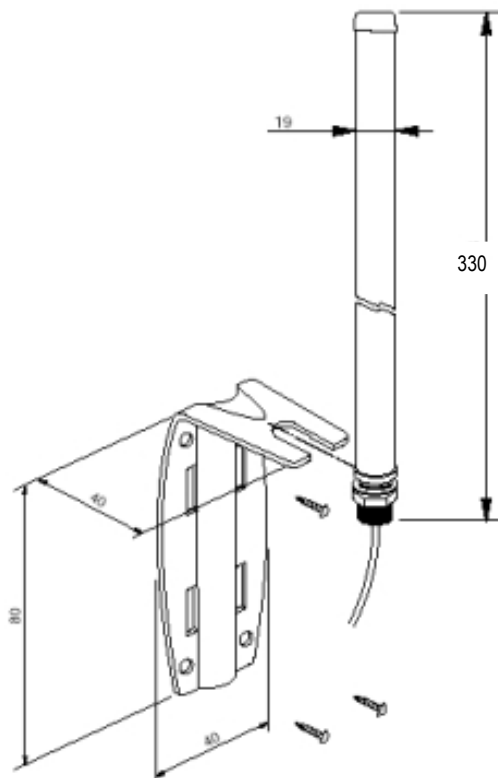
Order No.: 600518

Description:

This antenna features omnidirectional radiation and has a gain of 5 dBi. The antenna is equipped with a cable length of 1.2 m and can thus be positioned at some distance from the access point in order to improve the transmission and reception properties and to make optimum use of the antenna diversity. If the 1.2 m cable is not long enough, it can be extended with optionally available RTNC cables. With the help of an adapter to RSMA, this antenna can also be operated at devices with RSMA jack. This antenna is waterproof and can therefore be used both indoors and outdoors, e.g. to service an outdoor area. The scope of delivery includes mounting kits for wall, mast, and window mounting.

Features:

Item	ANT-Omni-5-2G-1.2m
Order No.	600518
Frequency band	2400 MHz –2500 MHz
Range	Line of sight approx. 500 m, indoors approx. 40 m
Polarization	Linear, vertical
VSWR	< 2.0
Gain	4 dBi (cable loss included)
Cable length	1.2 m
Connector	RTNC plug
Weight, dimensions	approx. 800 g, 33 cm x 1.9 cm
Color	White
Operating temperature	-40 °C to +80 °C
Storage temperature	-40 °C to +80 °C



ANT-Omni-8-Dual

Order No.: 5510000234

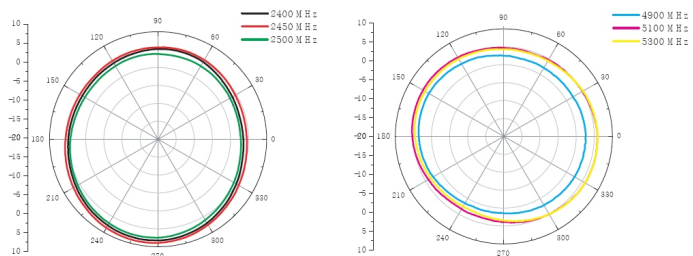
Description:

This antenna is an Indoor/Outdoor antenna for 2.4 GHz and 5 GHz. The antenna is suitable for smaller distances up to several hundred meters, depending on the desired data rate. It must be used with the over voltage protector ACC-EMP-N-dual.

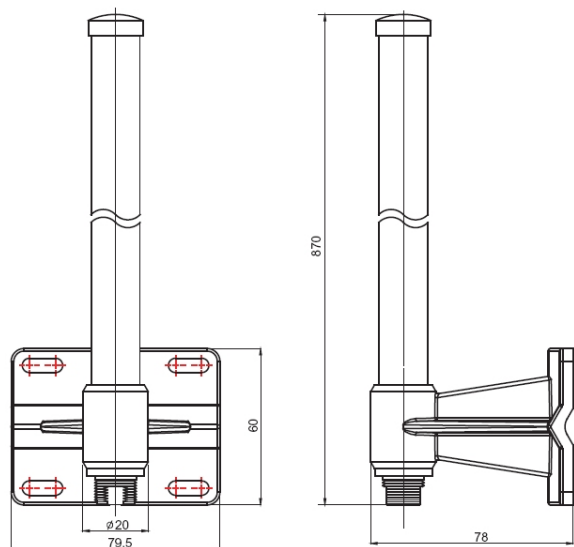
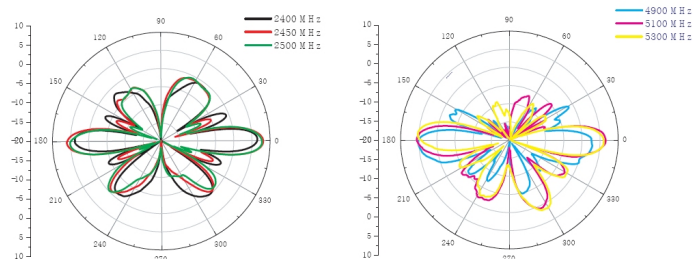
Frequency range	2400-2500 MHz 4900-5470 MHz	Connector	N female
Gain	8dBi	Survival wind speed	216 km/h
VSWR	2,0:1 max	Temperature	-40°C bis + 70°C
Impedance	50 Ohm	Humidity	95%@25°C
Polarization	Linear vertical	Color	White gray
HPBW / horizontal	360°	Material	ABS, UV resistant
HPBW / vertical	15°	Weight	350g
Power Handling	5W (CW)	Dimensions	81 * 78 * 870 mm



H-plane, Max. Gain = 8dBi, Omni



E-plane, Max. Gain = 8dBi, -3dB
Beamwidth=15 Grad



ANT-N-11-5G-dualpol for 802.11ac/n Bridge Links

Order number: 5500001542

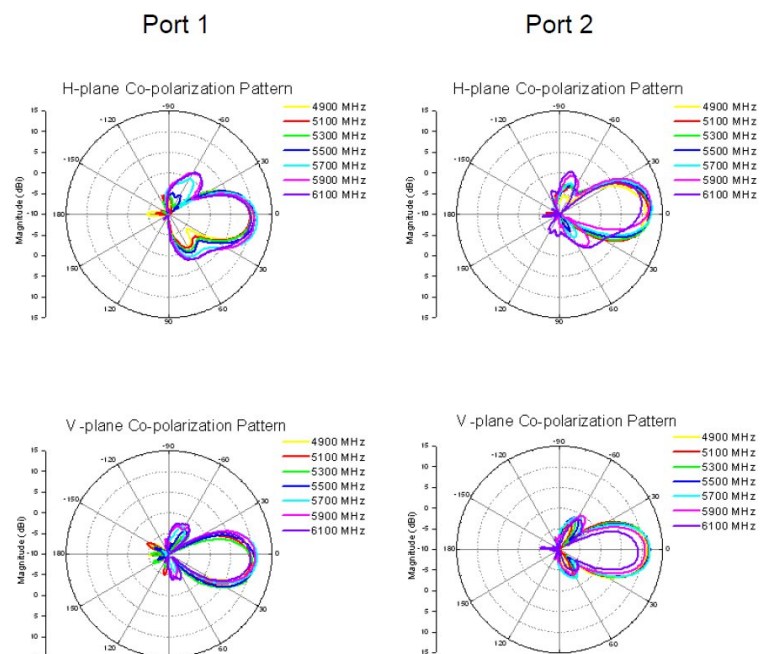
Description:

This 5 GHz Dual Polarization antenna is suitable for directional links in combination with 802.11ac/n units that transmit two streams. The antenna contains two independent antenna systems, the polarization of these systems are 90° twisted against each other. It has a gain of 11-12 dBi and a beam angle of 34°, which permits targeted transmission. The antenna is very small and fits perfectly for various applications, the performance is good enough for short and medium distances. The antenna has two N jack connectors. Shipment includes wall mounting and a simplified pole mounting.

Features:

Item	ANT-N-11-5G-dualpol
Order No.	5500001542
Frequency band	5150 - 5875 MHz
Polarization	Linear, vertical and horizontal
Gain	11-12 dBi
3 dB horizontal beam angle	36°
3 dB vertical beam angle	34°
Front to back ratio	> 20 dB
Max. power	6 W (CW) at 25 °C
Weight/Dimensions	236g / 122 x 122 x 47 mm
Mounting	Wall mounting or pole mounting by hose clamp
Connector/Cable	N-Jack / RG223, 150 mm
Color	Light gray
Material	Plastic
Operating temperature	-40 °C bis +70 °C
Storage temperature	-40 °C bis +70 °C
IP safety class	IP65

Remark: This antenna has two antenna sockets, therefore you need two sets of cable and surge adaptors.



ANT-N-20-5G-dualpol for 802.11ac/n Bridge Links Order number: 5500000551

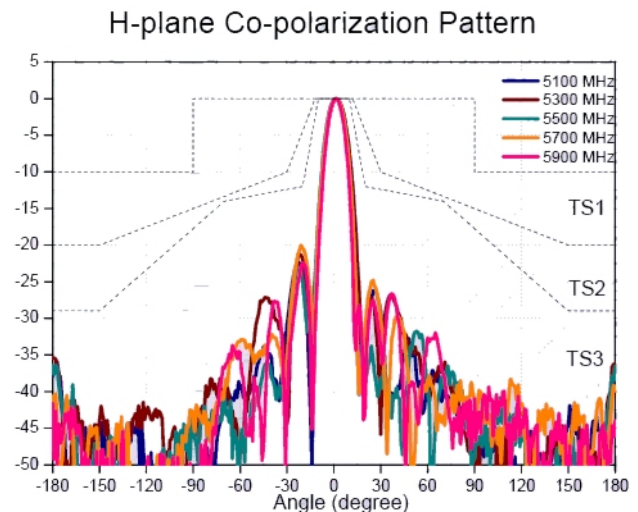
Description:

This 5 GHz Dual Polarization antenna is suitable for directional links in combination with 802.11n units there transmit two streams. The antenna contains two independent antenna systems, the polarization of these systems are 90° twisted against each other. It has a gain of 20 dBi and a beam angle of 10°, which permits targeted transmission. Due to its compact and flat shape, it is unobtrusive and easy-to-mount. The antenna has two N jack and can thus be connected to a WO1003ac by using the particularly low-loss cables. Shipment is including pole and wall mounting.

Features:

Item	ANT-N-20-5G-dualpol
Order No.	5500000551
Frequency band	5100 - 5900 MHz
Polarization	Linear, vertical and horizontal
Gain	20,6 dBi at 5100 MHz, 19,5 dBi at 5500 MHz 19 dBi at 5900 MHz
3 dB horizontal beam angle	10°
3 dB vertical beam angle	10°
Front to back ratio	> 30 dB
Max. power	6 W (CW) at 25 °C
Side-lobe suppression	ETSI EN 302 085 Range 1 TS1 - TS3
Weight, dimensions	1,5 kg, 320 x 320 x 20 mm
Pole Mounting	Suitable for poles from 48-80 mm Ø
Color	Light gray
Material	Plastic
Operating temperature	-40 °C bis +70 °C
Storage temperature	-40 °C bis +70 °C
IP safety class	IP 67

Remark: This antenna has two antenna sockets, therefore you need two sets of cable and surge adaptors.



ANT-N-D-13/15-dual

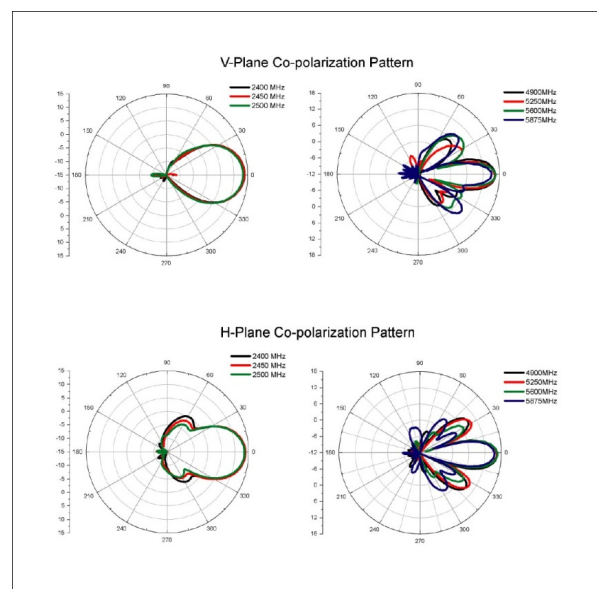
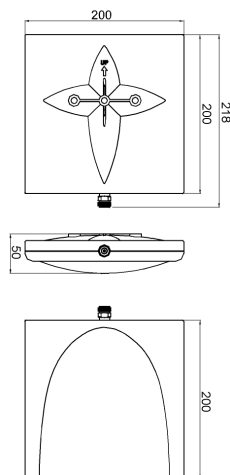
Order No.: 600513

Description:

This antenna is a component of an antenna solution for 2.4 GHz and 5 GHz point-to-point connections for coupling sites via WLAN. Due to its special characteristics, it can be used in either of the two frequency bands by merely switching the frequency at the AP. This means that the user can freely select the frequency band he or she prefers, e.g. if there are interfering applications in the 2.4 GHz band. The antenna is small and light and thus suitable for smaller distances of approx. 0.5 km, depending on the desired data rate and frequency band. Include wall and pole mounting unit.

Features:

Item	ANT-N-D-13/15-dual	
Order No.	600513	
Range	Please refer to the Solution Sheet for outdoor antenna solutions	
Frequency band	2400 MHz –2500 MHz	4900 MHz - 5875 MHz
Gain	13.5 dBi	15.5 dBi
VSWR	< 2.0	< 2.0
Polarization	Linear, vertical	Linear, vertical
HPBW / horizontal	30°	15°
HPBW / vertical	30°	15°
Front-to-back ratio	15 dB	
Tilt angle	0°	
Power consumption	10 W (cw)	
Impedance	50 Ohms	
Connector	N jack	
Weight, dimensions	407 g, 200 x 218 x 50 mm	
Color	Light gray	
Material	ABS, UV-resistant	
Operating temperature	-40 °C to +80 °C	
Humidity	95 % @ 25 °C	
Max. wind speed	216 km/h	



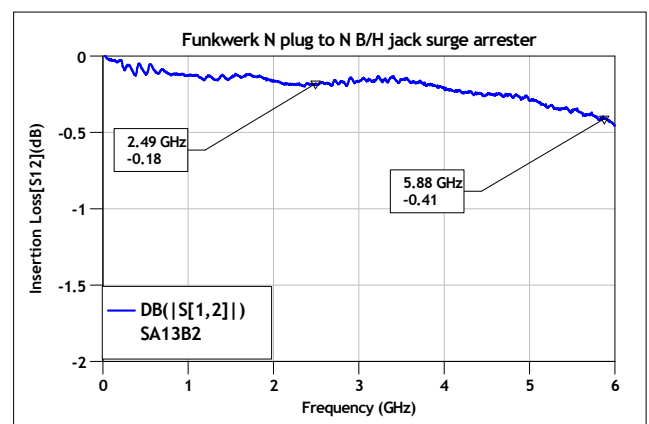
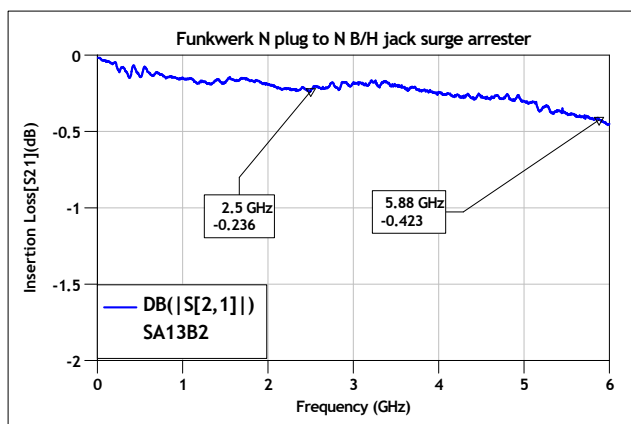
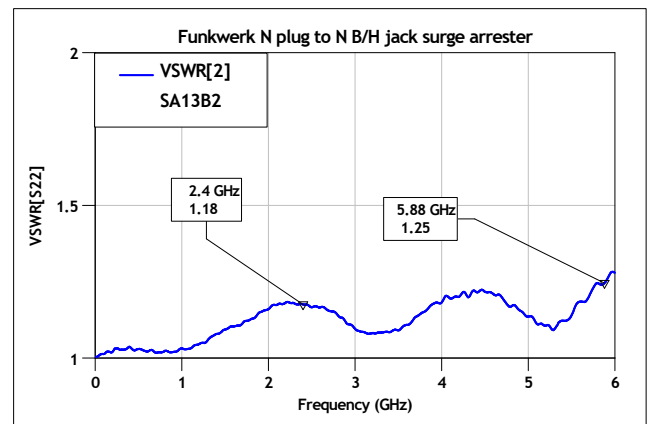
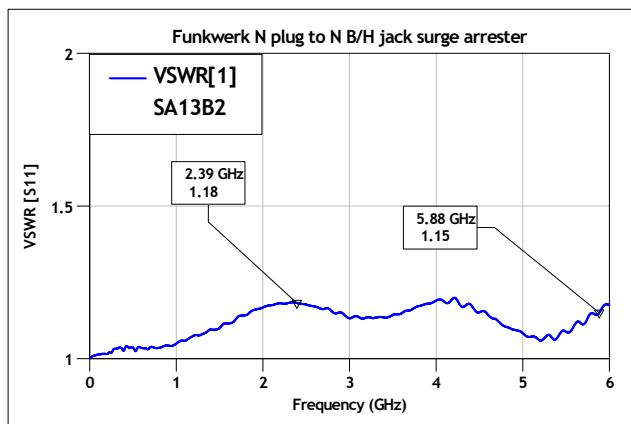
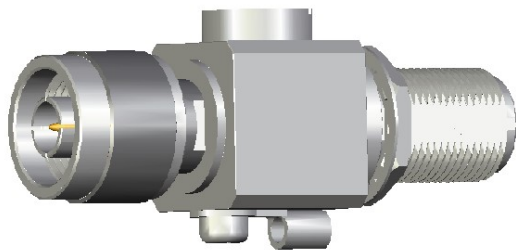
ACC-EMP-N-dual

Order No.: 600499

Description:

This overvoltage protector is used to largely prevent overvoltages from the outside from harming the electronics and the network, e.g. in the case of a thunderstorm. It is designed for up to 6 GHz and can therefore easily be used for systems from 2 GHz to 5 GHz. With its N plug and N jack, it can be placed between the RTNC-N cable and other N cables. The overvoltage protector should be mounted at the transition point to the building and must be sufficiently earthed.

Insertion loss: 0.4 dB at 2.4 GHz, 0.7 dB at 5.5 GHz



Low-Loss antenna cables

The antenna cables made from Low-Loss ULA400 coaxial cables and suitable for outdoor installations. The cables meet the demand of the bintec Access Points and antennas. The connectors are mounted with water protected shrink material.



Order number	Description	Specification	Typical application	Attenuation**	
				2,4 GHz	5 GHz
5500001541	CAB-RSMA-N-0,5m ***	RSMA Plug N Plug	W2022ac-ext, W2003ac-ext to ANT-N-11-5G or adaptor cable to CAB-N	1,5 dBm	2,0 dBm
5500001764	Cable CAB-N-N-0,5m	N Plug N Plug	Allow the connection of antennas with N socket to WO-Series devices	0,7 dBm	1,2 dBm
600505	CAB-RSMA-RTNC-0,2m	RSMA Plug RTNC Jack	RS-Serie to ANT-Omni-5-2G-1,2m	0,5 dBm	0,9 dBm
5500000846	CAB-N-3m	N Plug N Jack	N-N- Extension cable	1,1 dBm	1,6 dBm
5500000847	CAB-N-6m	N Plug N Jack	N-N- Extension cable	1,8 dBm	2,7 dBm
5500000848	CAB-N-9m	N Plug N Jack	N-N- Extension cable	3 dBm	4 dBm

* As long as on stock

** Attenuation values are only approximately

*** High flexible ULA198 cable