



Get **connected**



Vážení zákazníci,

představujeme Vám portfolio našich produktů. Najdete zde širokou nabídku antén, konektorů a kabelů.

Produktové portfolio je pro jednoduchou orientaci barevně rozlišeno a seřazeno podle technologií a způsobů uchycení jednotlivých produktů. Katalog obsahuje aktuální trendy dle vývoje trhu Internet of Things (IoT) a M2M technologií. Rozšířená nabídka kabelů a konektorů nabízí individuální uzpůsobení dle potřeb zákazníka.

V posledních dvaceti letech na trhu anténního průmyslu a bezdrátových technologií obsadila naše společnost SECTRON vedoucí pozici. V současné době jako autorizovaný distributor aktivních elektronických komponentů renomovaných značek nabízíme produkty pasivních dílů M2M technologií, včetně vlastní výroby kabelových redukcí, svazků a antén. Díky rozsáhlým zkušenostem v těchto oblastech poskytujeme komplexní řešení dle přání zákazníka a nabízíme kvalitní výrobky a služby od nápadu zákazníka až po realizaci.

Dear customers,

We would like to present our portfolio of antennas, cables and connectors. Inside the catalogue, you will find a wide range of our product portfolio, in which we use colour divisions and sorting according to technologies and methods of attachment for easy navigation. The catalogue contains products according to current trends in relation to the market development of the Internet of Things (IoT) and M2M technology. The extended range of cables and connectors offers tailor-made solutions that satisfy specific requirements of each customer.

During the last twenty years, SECTRON has occupied a leading market position within the antenna industry and wireless technologies market as an authorized distributor for worldwide leaders in machine-to-machine communication, including our own production of cable assemblies and antennas. Owing to extensive experience in this, we are able to provide comprehensive solutions for a vast range of M2M applications. From idea to implementation, each project will benefit from our high quality products and services.

# INTRODUCTION



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# GSM/UMTS/LTE

## Magnetic



	AO-AGSM-MG2	AO-AGSM-MG3	AO-AGSM-MG5	AO-AGSM-MG9
ELECTRICAL DATA	<b>GSM Antenna Magnetic MG2</b>	<b>GSM Antenna Magnetic MG3</b>	<b>GSM Antenna Magnetic MG5</b>	<b>UMTS Antenna Magnetic MG9</b>
Working Frequency	900/1800 MHz	900/1800 MHz	900/1800 MHz	900/1800 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	2.5 dBi	3 dBi	5 dBi	9 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 1.5 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1
MECHANICAL DATA				
Dimensions	Ø26.7 x 116.7 mm	Ø30 x 232 mm	Ø40 x 282 mm	Ø70 x 453.7 mm
Weight	82 g	66 g	74 g	300 g
Operating Temperature	-30°C to 90°C	-40°C to 85°C	-30°C to 90°C	-30°C to 90°C
Mounting	Magnetic	Magnetic	Magnetic	Magnetic
Cable	RG174/U, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG58/U, 3.5m <sup>1)</sup>
Connector	SMA(m), FME(f) <sup>2)</sup>	SMA(m), FME(f), MMCX(m) <sup>2)</sup>	SMA(m), FME(f), MCX(m), MMCX(m) <sup>2)</sup>	SMA(m), FME(f) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GSM/UMTS/LTE

## Magnetic



	AO-AUMTS-M2S	AO-AUMTS-G016S	AO-AUMTS-G821S	AO-AUMTS-M3
ELECTRICAL DATA	<b>UMTS Antenna Magnetic M2</b>	<b>UMTS Antenna Magnetic 016</b>	<b>UMTS Antenna Magnetic 821</b>	<b>UMTS Antenna Magnetic M3</b>
Working Frequency	800/900/1800/1900/2100 MHz	800/900/1700/1800/1900/2100 MHz	800/900/1700/1800/1900/2100 MHz	900/1800/1900/2100 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	2 dBi	3 dBi	3 dBi	3 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.5 : 1	< 2.0 : 1

	AO-AUMTS-M2S	AO-AUMTS-G016S	AO-AUMTS-G821S	AO-AUMTS-M3
MECHANICAL DATA				
Dimensions	Ø34.3 x 101 mm	Ø29.4 x 121 mm	Ø29.4 x 305 mm	Ø26.7 x 214 mm
Weight	66 g	47 g	100 g	65 g
Operating Temperature	-20°C to 60°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Mounting	Magnetic	Magnetic	Magnetic	Magnetic
Cable	RG174/U, 3m <sup>1)</sup>	RG58, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>
Connector	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m), FME(f) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GSM/UMTS/LTE

## Magnetic



	AO-AUMTS-MG5S	AO-AUMTS-G825S	AO-ALTE-MG5S	AO-ALTE-G024LS
ELECTRICAL DATA	<b>UMTS Antenna Magnetic MG5</b>	<b>UMTS Antenna Magnetic 825</b>	<b>LTE Antenna Magnetic MG5</b>	<b>LTE Antenna Magnetic 024L</b>
Working Frequency	900/1800/2100 MHz	800/900/1700/1800/1900/2100 MHz	700/800/900/1800/1900/2100/2500/2600/2700 MHz	800/900/1700/1800/1900/2100 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	5 dBi	7 dBi	3-5 dBi	5 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1

	AO-AUMTS-MG5S	AO-AUMTS-G825S	AO-ALTE-MG5S	AO-ALTE-G024LS
MECHANICAL DATA				
Dimensions	Ø81 x 346 mm	Ø70 x 675 mm	Ø70 x 305 mm	Ø40 x 311 mm
Weight	330 g	347 g	220 g	120 g
Operating Temperature	-30°C to 90°C	-40°C to 85°C	-30°C to 90°C	-40°C to 85°C
Mounting	Magnetic	Magnetic	Magnetic	Magnetic
Cable	RG195, 3m <sup>1)</sup>	RG58/U, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG58, 3m <sup>1)</sup>
Connector	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GSM/UMTS/LTE

## Magnetic



AO-ALTE-MG9S	AO-ALTE-G124S	AO-ALTE-MG9S-F	AO-ALTE-G825-1S	AO-ALTE-MG3DS5
<b>LTE Antenna Magnetic MG9</b>	<b>LTE Antenna Magnetic 124</b>	<b>LTE Antenna Magnetic MG9 FLEXI</b>	<b>LTE Antenna Magnetic 825-1</b>	<b>LTE Antenna MIMO Magnetic MG3D</b>
700/800/900/1800/1900/2100 /2500/2600/2700 MHz	700/800/900/1700/1800/ 1900/2100/2600 MHz	700/800/900/1800/1900/2100 /2600/2700 MHz	700/800/900/1700/1800/ 1900/2100/2600 MHz	700/800/900/1700/1800/ 1900/2100/2300/2400/2500/ 2600/2700 MHz
Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
5-9 dBi	6 dBi	7-9 dBi	9 dBi	0-5 dBi
Linear	Linear	Linear	Linear	Linear
50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
< 2.0 : 1	< 2.0 : 1	< 1.8 : 1	< 2.0 : 1	< 2.0 : 1
Ø75 x 446 mm	Ø29.5 x 315 mm	Ø75 x 346 mm	Ø65 x 460 mm	326 x 177 mm
222 g	56 g	325 g	303 g	303 g
-20°C to 55°C	-40°C to 85°C	-30°C to 90°C	-40°C to 85°C	-40°C to 85°C
Magnetic	Magnetic	Magnetic	Magnetic	Magnetic
RG174, 3m <sup>1)</sup>	RG174, 3m <sup>1)</sup>	RG195, 3m <sup>1)</sup>	RG58, 3m <sup>1)</sup>	2x RG58, 5m <sup>1)</sup>
SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	2x SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43



# GSM/UMTS/LTE Adhesive



	AO-AGSM-40	AO-AGSM-SA1	AO-AG-FPC14	AO-AUMTS-G107S
ELECTRICAL DATA	GSM Antenna Adhesive 40	GSM Antenna Adhesive SA1	UMTS Antenna Adhesive FPC14	UMTS Antenna Adhesive 107
Working Frequency	900/1800/2100 MHz	900/1800 MHz	900/1700/1800/1900/2100 MHz	800/1700/1800/1900/2100/2400/2500 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	2 dBi	2.5 dBi	2 dBi	2 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1

	AO-AGSM-40	AO-AGSM-SA1	AO-AG-FPC14	AO-AUMTS-G107S
MECHANICAL DATA				
Dimensions	Ø71 x 12 mm	129.5 x 22.8 x 6,5 mm	70 x 20 mm	72 x 25 x 7.5 mm
Weight	171 g	21 g	0.51 g	49 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-30°C to 80°C	-40°C to 85°C
Mounting	Adhesive	Adhesive	Adhesive	Adhesive
Cable	RG174/U, 5m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	088 (1.37), 0.1 m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>
Connector	SMA(m) <sup>2)</sup>	SMA(m), FME(f), MMCX(m)90° <sup>2)</sup>	U.FL(f), SMA(m), MMCX(m)90° <sup>2)</sup>	SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GSM/UMTS/LTE Adhesive



	AO-AUMTS-G117S	AO-AUMTS-G011S	AO-ALTE-S2	AO-ALTE-SL2
ELECTRICAL DATA	UMTS Antenna Adhesive 117	UMTS Antenna Adhesive 011	LTE Antenna Adhesive S2	LTE Antenna Adhesive SL2
Working Frequency	800/900/1700/1800/1900/2100 MHz	800/900/1700/1800/1900/2100 MHz	700/800/900/1800/1900/2100/2400/2500/2600/2700 MHz	700/800/900/1800/1900/2100/2400/2500/2600/2700 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	2 dBi	2 dBi	2.5 dBi	2.5 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.5:1	< 3.8 : 1	< 3.8 : 1

	AO-AUMTS-G117S	AO-AUMTS-G011S	AO-ALTE-S2	AO-ALTE-SL2
MECHANICAL DATA				
Dimensions	35.5 x 39.9 x 5.5 mm	Ø71,5 x 15,3 mm	108 x 18 mm	104 x 10.9 mm
Weight	46 g	69 g	62 g	36 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-20°C to 60°C	-20°C to 60°C
Mounting	Adhesive	Adhesive	Adhesive	Adhesive
Cable	RG174/U, 3m <sup>1)</sup>	RG174/U, 5m <sup>1)</sup>	RG174 /U, 2.5m <sup>1)</sup>	RG174 /U, 2.5m <sup>1)</sup>
Connector	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GSM/UMTS/LTE Adesive



	AO-ALTE-SA3	AO-ALTE-G108LS	AO-ALTE-SA5	AO-ALTE-G017LS
ELECTRICAL DATA	<b>LTE Antenna Adhesive SA3</b>	<b>LTE Antenna Adhesive 108L</b>	<b>LTE Antenna Adhesive SA5</b>	<b>LTE Antenna Adhesive 017L</b>
Working Frequency	700/800/900/1800/1900/2100/2400/2500/2600/2700 MHz	800/900/1700/1800/1900/2100/2600 MHz	800/900/1700/2100/2700 MHz	800/900/1700/1800/1900/2100/2600 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	2.5 dBi	2.5 dBi	3-5 dBi	5 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1

MECHANICAL DATA				
Dimensions	115.5 x 22.2 x 7.5 mm	126 x 16.2 x 8.8 mm	115 x 55.5 x 9.7 mm	104,6 x 21.7 x 5.8 mm
Weight	54 g	48 g	54 g	54 g
Operating Temperature	-20°C to 60°C	-40°C to 85°C	-20°C to 60°C	-40°C to 85°C
Mounting	Adhesive	Adhesive	Adhesive	Adhesive
Cable	RG174 A/U, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG58, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>
Connector	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GSM/UMTS/LTE Mounting



AO-AGSM-36	AO-AUMTS-G023S	AO-AGSM-MI3	AO-AGSM-MI7C	AO-AGSM-MI9S-FLEXI
<b>GSM Antenna Mounting 36</b>	<b>GSM Wide band Antenna G023</b>	<b>GSM Antenna Mounting MI3</b>	<b>GSM Antenna Mounting MI7C</b>	<b>GSM Antenna Mounting MI9 FLEXI</b>
900/1800/2100 MHz	900/1700/1800/1900/2100 MHz	900/1800 MHz	800/900 MHz	900/1800 MHz
Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
0-2 dBi	2 dBi	3 dBi	5 dBi	6 dBi
Linear	Linear	Linear	Linear	Linear
50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1
Ø54.4 x 24.6 mm	Ø45.2 x 75.4 mm	Ø35 x 140 mm	Ø33 x 451 mm	Ø33 x 334 mm
130 g	150 g	207 g	144 g	226 g
-30°C to 90°C	-40°C to 85°C	-30°C to 90°C	-30°C to 90°C	-30°C to 90°C
Mounting	Mounting	Mounting	Mounting	Mounting
RG174/U, 3m <sup>1)</sup>	RG58/U, 3m <sup>1)</sup>	RG58U, 4.5m <sup>1)</sup>	RG174/U, 5m <sup>1)</sup>	RG58/U, 5m <sup>1)</sup>
SMA(m), FME(f) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m), FME(f) <sup>2)</sup>	MMCX(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GSM/UMTS/LTE Mounting



	AO-AGSM-YASS	AO-AUMTS-G008S	AO-AUMTS-MI5	AO-AGSM-OM54
ELECTRICAL DATA	<b>GSM Antenna Mounting YAGI</b>	<b>UMTS Antenna Mounting 008</b>	<b>UMTS Antenna Mounting MI5</b>	<b>UMTS Antenna Mounting OM54</b>
Working Frequency	900/1800 MHz	800/900/1700/1800/1900/2100 MHz	900/1900/2100 MHz	800/900/1800/1900/2100 MHz
Radiation	Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	12 dBi	2 dBi	5 dBi	7 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.5 : 1	< 2.0 : 1	< 2.0 : 1

	AO-AGSM-YASS	AO-AUMTS-G008S	AO-AUMTS-MI5	AO-AGSM-OM54
MECHANICAL DATA				
Dimensions	300 x 200 x 26.4 mm	Ø81.3 x 14.6 mm	Ø33 x 351 mm	Ø20 x 1060 mm
Weight	655 g	92 g	190 g	584 g
Operating Temperature	-30°C to 90°C	-40°C to 85°C	-20°C to 60°C	-20°C to 60°C
Mounting	Mounting	Mounting	Mounting	Mounting
Cable	RG58/U, 10m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG195/U, 3m <sup>1)</sup>	N/A
Connector	FME(f) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	N(f)



1) other cable length options on request

2) for other connector options see page 40- 43

# GSM/UMTS/LTE Mounting



AO-AUMTS-YASS	AO-ALTE-36S	AO-ALTE-MI3S	AO-ALTE-OM56	AO-ALTE-YASS
<b>UMTS Antenna Mounting YAGI</b>	<b>LTE Antenna Mounting PUK</b>	<b>LTE Antenna Mounting MI3</b>	<b>LTE Antenna Mounting OM56</b>	<b>LTE Antenna Mounting YAGI</b>
800/900/1800/1900/2100 MHz	700/800/900/1700/1800/2100/2500/2600/2700 MHz	700/800/900/1700/1800/1900/2100/2500/2600/2700 MHz	700/800/900/1800/1900/2100/2400/2500/2600/2700 MHz	700/800/900/1800/1900/2100/2500/2600/2700 MHz
Directional	Omni-Directional	Omni-Directional	Omni-Directional	Directional
10 dBi	0-2 dBi	3 dBi	5 dBi	10 dBi
Linear	Linear	Linear	Linear	Linear
50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 3.5 : 1

540 x 180 mm	Ø54.4 x 24.6 mm	Ø32.5 x 220 mm	Ø20 x 750 mm	540 x 180 mm
960 g	122 g	212 g	615 g	569 g
-20°C to +60°C	-30°C to 90°C	-20°C to +60°	-20°C to 60°C	-20°C to 60°C
Mounting	Mounting	Mounting	U-bolt/Mast	Mounting
RG58/U, 10m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG58/U, 4.5m <sup>1)</sup>	N/A	RG58/U, 0.28m <sup>1)</sup>
SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	N(f)	SMA(m) <sup>2)</sup>

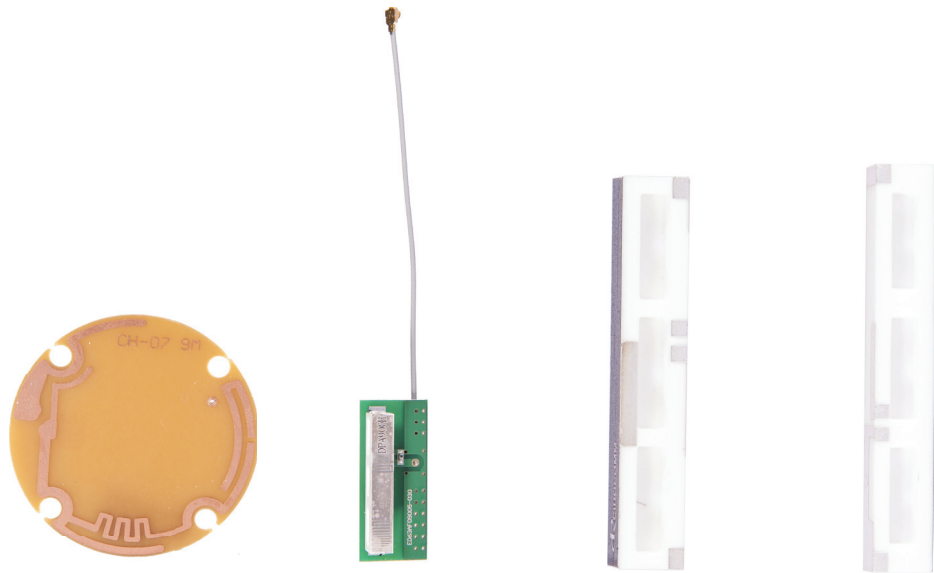


1) other cable length options on request

2) for other connector options see page 40- 43

# GSM/UMTS/LTE

## SMT



	AO-AGSM-P30	AO-AG-PA24	AO-AG-PA25	AO-ALTE-PIF01
ELECTRICAL DATA	<b>GSM Antenna SMT P30</b>	<b>UMTS Antenna SMT PA24</b>	<b>UMTS Antenna SMT PA25</b>	<b>UMTS Antenna SMT PIF01</b>
Working Frequency	900/1800 MHz	900/1800/1900/2100 MHz	900/1700/1800/1900/ 2100 MHz	700/800/900/ 1800/1900/2100 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	0 dBi	0 dBi	0 dBi	0 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 3.0 : 1	< 3.5 : 1	< 4.0 : 1

MECHANICAL DATA				
Dimensions	Ø47 x 1.66 mm	35 x 15 x 7 mm	35 x 6 x 5 mm	40 x 6 x 5 mm
Weight	3.57 g	3.48 g	3.29 g	3.29 g
Operating Temperature	-30°C to 90°C	-40°C to 85°C	-30°C to 85°C	-40°C to 85°C
Mounting	SMT	SMT	SMT	SMT
Cable	N/A	068 (1.13), 0.1m	N/A	N/A
Connector	N/A	IPX MHF I(f) R/A	N/A	N/A

# GSM/UMTS/LTE

## SMT



AO-ALTE-PIF02

### LTE Antenna SMT PIF02

#### ELECTRICAL DATA

Working Frequency	700/800/900/1800/ 1900/2100/2500/2600 MHz
Radiation	Omni-Directional
Gain	0 dBi
Polarization	Linear
Impedance	50 $\Omega$
VSWR	< 3.5 : 1

#### MECHANICAL DATA

Dimensions	40 x 6 x 5 mm
Weight	3.06 g
Operating Temperature	-40°C to 85°C
Mounting	SMT
Cable	N/A
Connector	N/A



# GSM/UMTS/LTE Stick



	AO-AGSM-SMRS	AO-AGSM-SMVS	AO-AUMTS-G401-1SS	AO-AUMTS-G401-1RS
ELECTRICAL DATA	<b>UMTS Antenna Stick SMRS</b>	<b>UMTS Antenna Stick SMVS</b>	<b>UMTS Antenna Stick 401-1S</b>	<b>UMTS Antenna Stick 90° 401-1R</b>
Working Frequency	800/900/1800/1900/2100 MHz	800/900/1800/1900/2100 MHz	800/900/1700/1800/1900/2100 MHz	800/900/1700/1800/1900/2100 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	2 dBi	2 dBi	2 dBi	2 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.5 : 1	< 2.5 : 1	< 2.5 : 1	< 2.5 : 1

	AO-AGSM-SMRS	AO-AGSM-SMVS	AO-AUMTS-G401-1SS	AO-AUMTS-G401-1RS
MECHANICAL DATA				
Dimensions	Ø7 x 54 x 16.8 mm	Ø7 x 56 mm	Ø9 x 60 mm	Ø9 x 55 x 16.5 mm
Weight	8 g	5 g	5.8 g	7.44 g
Operating Temperature	-20°C to 60°C	-30°C to 90°C	-40°C to 85°C	-40 °C to 85 °C
Mounting	Screw	Screw	Screw	Screw
Connector	SMA 90° (m)	SMA(m)	SMA(m)	SMA 90° (m)

# GSM/UMTS/LTE Stick



	AO-AGSM-FMEK	AO-AGSM-SMAK	AO-AUMTS-SRPK	AO-AGSM-TG09
ELECTRICAL DATA	<b>UMTS Antenna Stick FMEK</b>	<b>UMTS Antenna Stick SMAK</b>	<b>UMTS Antenna Stick SRPK</b>	<b>UMTS Antenna Stick TG09</b>
Working Frequency	800/900/1700/2100 MHz	900/960/1700/1800/1900/2100 MHz	800/900/1800/1900/2100 MHz	800/900/1800/1900/2100 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	2 dBi	2 dBi	2 dBi	2 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.5 : 1	< 2.8 : 1	< 2.6 : 1	< 2.0 : 1

	AO-AGSM-FMEK	AO-AGSM-SMAK	AO-AUMTS-SRPK	AO-AGSM-TG09
MECHANICAL DATA				
Dimensions	90°: 87,4 x 37,5 x 9,3 mm 180°: Ø9.3 x 114 mm	90°: 88 x 31 x 9,3 mm 180°: Ø9.3 x 108 mm	90°: 26,6 x 87,3 x 9,3 mm 180°: Ø9.3 x 104 mm	90°: 46,7 x 29,7 x 10 mm 180°: Ø10 x 70.7 mm
Weight	11 g	12 g	12 g	9 g
Operating Temperature	-20°C to 60 °C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Mounting	Screw	Screw	Screw	Screw
Connector	FME(f)	SMA(m)	SMA-RP(f pin)	SMA(m)

# GSM/UMTS/LTE Stick



ELECTRICAL DATA	AO-ALTE-FSMAK	AO-ALTE-SMA5	AO-ALTE-G410LS	AO-ALTE-FSMAK3
	LTE Antenna Stick FSMAK	LTE Antenna FLAT Stick 690-2700 MHz	LTE Antenna Stick 90°/180° 410L	LTE Antenna FLAT Stick 90°/180°
Working Frequency	700/800/900/1800/ 1900/2100/2300/2400/ 2500/2600/2700 MHz	800/900/1800/ 1900/2100/2300/2400/ 2500/2600 MHz	700/800/900/1700/1800/ 1900/2100/2600 MHz	700/800/900/1800/ 1900/2100/2300/2400/ 2500/2600/2700 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	0-3 dBi	0-5 dBi	3 dBi	3 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.5 : 1	< 2.5 : 1	< 3 : 1	< 2.0 : 1

MECHANICAL DATA				
Dimensions	90°: 177 x 38,2 x 10 mm 180°: 20 x 10 x 201 mm	12,5 x 193 mm	90°: 173 x 32 x 8 mm 180°: Ø8 x 198 mm	90°: 144 x 32 x 13 mm 180°: Ø8 x 173 mm
Weight	23 g	28 g	27 g	23 g
Operating Temperature	-10°C to 50°C	-30 to 80 °C	-40°C to 85°C	-10°C to 50°C
Mounting	Screw	Screw	Screw	Screw
Connector	SMA(m)	SMA(m)	SMA(m)	SMA(m)

# GSM/UMTS/LTE Stick



	AO-ALTE-MG5SP	AO-ALTE-FSMAK5
ELECTRICAL DATA	LTE Antenna Stick MG5	LTE Antenna FLAT Stick 90°/180°
Working Frequency	700/800/900/1800/ 1900/2100 MHz	700/800/900/1800/ 1900/2100/2300/2400/ 2500/2600/2700 MHz
Radiation	Omni-Directional	Omni-Directional
Gain	5 dBi	5 dBi
Polarization	Linear	Linear
Impedance	50 Ω	50 Ω
VSWR	< 3.5 : 1	< 2.0 : 1

MECHANICAL DATA		
Dimensions	90°: 217 x 37,3 x 16,2 180°: Ø13 x 240 mm	90°: 36,6 x 209 x 24 180°: 24 x 223 mm
Weight	38 g	39,75 g
Operating Temperature	-20°C to 55°C	-10°C to 50°C
Mounting	Screw	Screw
Connector	SMA(m)	SMA(m)

# CDMA

# ISM



## ELECTRICAL DATA

	AO-ACDMA-MGS	AO-ACDMA-OM55	AW-A868-79S	AO-A868-YASS
	<b>CDMA Antenna Mounting MG</b>	<b>CDMA Antenna Mounting OM55</b>	<b>ISM Antenna Stick 79</b>	<b>ISM Antenna Mounting YASS</b>
Working Frequency	410/470 MHz	410/470 MHz	868 MHz	868 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Directional
Gain	0 dBi	7 dBi	0 dBi	10 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 1.6 : 1	< 2.0 : 1

## MECHANICAL DATA

Dimensions	Ø30 x 163 mm	Ø18 x 975 mm	Ø9.3 x 104 mm	540 x 180 mm
Weight	49 g	580 g	11 g	866 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-20°C to 60°C	-40°C to 85°C
Mounting	Magnetic	U-bolt/Mast	Screw	Mounting
Cable	RG174/U, 3m <sup>1)</sup>	N/A	N/A	RG58, 10m <sup>1)</sup>
Connector	SMA(m) <sup>2)</sup>	N(f)	SMA(m)	SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# DVB-T



	AO-ADVBT-45P	AO-ADVBT-05P
<b>ELECTRICAL DATA</b>	<b>DVB-T Antenna Magnetic 45</b>	<b>DVB-T Antenna Magnetic 05</b>
Working Frequency	470 ~ 864 MHz	173 ~ 230 MHz 470 ~ 864 MHz
Radiation	Omni-Directional	Omni-Directional
Gain	0 dBi	3 dBi
Polarization	Linear	Linear
Impedance	75 Ω	75 Ω
VSWR	< 2.0 : 1	< 1.8 : 1

	AO-ADVBT-45P	AO-ADVBT-05P
<b>MECHANICAL DATA</b>		
Dimensions	Ø80 x 135 mm	Ø50 x 337 mm
Weight	380 g	225 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C
Mounting	Magnetic	Magnetic
Cable	3C2V, 3.5m	3C2V, 3.5m
Connector	IEC	IEC

# GPS/GLONASS Magnetic



ELECTRICAL DATA	AP-A20S-M3	AP-AGNSS-SMA	AP-AGNSS-A057S
	GPS Antenna Magnetic EA-200	GPS/GLONASS Antenna Magnetic GNSS	GPS/GLONASS Antenna Magnetic A057
Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS		1602 MHz	1602 MHz
Bandwidth	2 MHz	8/16 MHz	5 MHz
Polarization	RHCP	RHCP	RHCP
Gain GPS	27 dBi	25 dBi	28 dBi
Gain GLONASS		18 dBi	28 dBi
Impedance	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 1.5 : 1
Input Voltage	2.5 V - 5.5 V	2.5 V - 5 V	2.2 V - 5 V

MECHANICAL DATA			
Dimensions	38 x 34 x 12.6 mm	37,5 x 34,5 x 12,5 MM	52.5 x 59.2 x 15 mm
Weight	70 g	56 g	70 g
Operating Temperature	-30°C to 80 °C	-40°C to 85°C	-40°C to 85°C
Mounting	Magnetic	Magnetic	Magnetic
Cable	RG174/U, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>
Connector	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GPS/GLONASS SMT Patch



ELECTRICAL DATA	AP-AP-SGP18	AP-AP-PIFA01	AP-AGNSS-SGP15-4	AP-AGNSS-SGP18-4
	GPS Antenna SMT Patch SGP	GPS Antenna SMT Patch PIFA	GPS/GLONASS Antenna SMT Patch SGP	GPS/GLONASS Antenna SMT Patch SGP18
Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS			1602 MHz	1602 MHz
Bandwidth	5 MHz	20 MHz	16 MHz	16 MHz
Polarization	RHCP	RHCP	RHCP	RHCP
Gain	1 dBi	1.5 dBi	0 dBi	1.5 dBi
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 1.5 : 1	< 2.0 : 1	< 1.8 : 1	< 1.5 : 1
Input Voltage	1.5 V	2.0 V	1.8 V	1.5 V

MECHANICAL DATA				
Dimensions	18 x 18 x 4 mm	10 x 4 x 3 mm	15 x 15 x 4 mm	18 x 18 x 4 mm
Weight	6.2 g	0.4 g	4.54 g	5.76 g
Operating Temperature	-40°C to 105°C	-30°C to 85°C	-40 to 105°C	-40°C to 105°C
Mounting	SMT Patch	SMT Patch	SMT Patch	SMT Patch



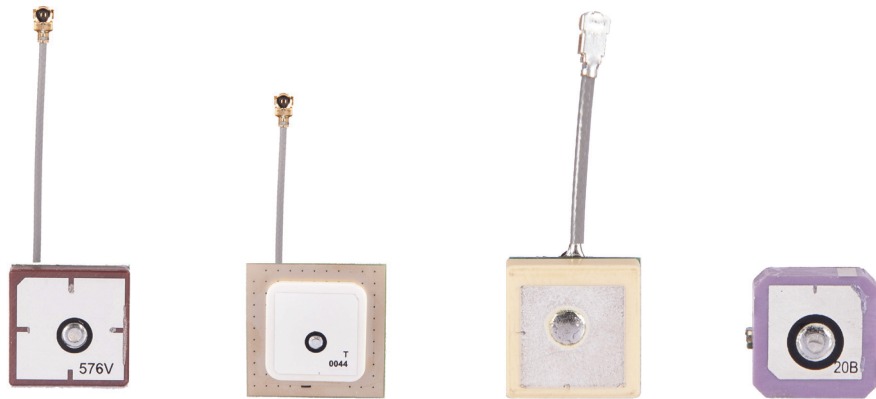
# GPS/GLONASS PIN Patch



	AP-AP-GP18-2	AP-AGNSS-GP25-4	AP-AP-GP25-4
ELECTRICAL DATA	<b>GPS Antenna Pin Patch GP18</b>	<b>GPS/GLONASS AntennaPin Patch GP25</b>	<b>GPS Antenna Pin Patch GP25</b>
Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS		1602 MHz	
Bandwidth	5 MHz	26 MHz	10 MHz
Polarization	RHCP	RHCP	RHCP
Gain	0 dBi	0.5 dBi/2 dBi	3.5 dBi
Impedance	50 Ω	50 Ω	50 Ω
VSWR	< 1.5 : 1	< 1.5 : 1	< 1.8 : 1
Axial Ratio	3 dB	3 dB	3 dB

MECHANICAL DATA			
Dimensions	18 x 18 x 2.2 mm	25 x 25 x 4 mm	25 x 25 x 4 mm
Weight	3.18 g	9.4 g	9.41 g
Operating Temperature	-40°C to 105 °C	-40°C to 105°C	-40°C to 105°C
Mounting	Pin Patch	Pin Patch	Pin Patch

# GPS/GLONASS Antenna Module



ELECTRICAL DATA	AP-AA17-15U	AP-AP25-16U	AP-AA12-24U	AP-AP10FSF-25SM
	<b>GPS Antenna Module AA17-15</b>	<b>GPS Antenna Module AP25-16</b>	<b>GPS Antenna Module AA12-24</b>	<b>GPS Antenna Module AP10FSF</b>
Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS				
Polarization	RHCP	RHCP	RHCP	RHCP
Gain	15 dBi	16 dBi	24 dBi	20 - 25 dBi
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1
Axial Ratio	3 dB	3 dB	3 dB	4 dB
Input Voltage	2.7 - 3.3 V	2.7 - 3.3 V	3 V	1.8 - 5.5 V

MECHANICAL DATA				
Dimensions	17 x 17 x 6.3 mm	35 x 35 x 4.49 mm	13 x 13 x 6,85 mm	10 x 10 x 11 mm
Weight	6.55 g	7.1 g	3.68 g	4.9 g
Operating Temperature	-20°C to 65°C	-30°C to 80°C	-40°C to 85°C	-40°C to 85°C
Mounting	Adhesive	Adhesive	Adhesive	SMT
Cable	Ø 1.13, 40 mm	Ø 1.13, 52 mm	Ø 1.37, 57 mm	N/A
Connector	IPX MHF I(f) R/A	IPX MHF I(f) R/A	U.FL(f) R/A	N/A

# GPS/GLONASS Antenna Module



ELECTRICAL DATA	AP-AP10-25U	AP-AP22-27H	AP-AGNSS-GA25-4-27	AP-AP25-30
	<b>GPS Antenna Module AP10-25</b>	<b>GPS Antenna Module AP22</b>	<b>GPS/GLONASS Antenna Module GA25-4</b>	<b>GPS Antenna Module AP25-30</b>
Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS		1602 MHz	1602 MHz	
Polarization	RHCP	RHCP	RHCP	RHCP
Gain	21 - 25 dBi	28 dBi	28 dBi	30 dBi
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1
Axial Ratio	4.0 dB	3.0 dB	3.0 dB	4.0 dB
Input Voltage	1,8 - 3,3 V	2,5 - 5 V	2,5 - 5 V	2,5 - 5,5 V

MECHANICAL DATA				
Dimensions	10 x 10 x 6 mm	22 x 21 x 7,5 mm	25 x 25 x 4 mm	25 x 25 x 8 mm
Weight	2,86 g	11,86 g	12 g	12 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 105°C	-30°C to 80 °C
Mounting	Adhesive	Adhesive	Adhesive	Adhesive
Cable	RF, 50 mm	RF, 85 mm	RF, 100 mm	Ø 1,13, 80 mm / RG174/U, 5m <sup>1)</sup>
Connector	IPEX MHF I(f) R/A	H.FL R/A	U.FL(f) R/A	IPX MHF I(f) R/A, SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GPS/GLONASS Adhesive



	AP-AGNSS-20B	AP-AGNSS-30S	AP-AGNSS-A002S	AP-AGNSS-40S
ELECTRICAL DATA	GPS/GLONASS Antenna Adhesive 20	GPS/GLONASS Antenna Adhesive 30	GPS/GLONASS Antenna Adhesive 002	GPS/GLONASS Antenna Adhesive 40
Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS	1602 MHz	1602 MHz	1602 MHz	1602 MHz
Bandwidth	8 MHz	10 MHz	10 MHz	10 MHz
Polarization	RHCP	RHCP	RHCP	RHCP
Gain	20 dBi	27 dBi	28 dBi	30 dBi
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 1.8 : 1	< 2.0 : 1	< 2.0 : 1
Input Voltage	1.6 V	2.7-5V DC	2.2-5V DC	3.3 V

	AP-AGNSS-20B	AP-AGNSS-30S	AP-AGNSS-A002S	AP-AGNSS-40S
MECHANICAL DATA	GPS/GLONASS Antenna Adhesive 20	GPS/GLONASS Antenna Adhesive 30	GPS/GLONASS Antenna Adhesive 002	GPS/GLONASS Antenna Adhesive 40
Dimensions	34.2 x 38.2 x 13.6 mm	Ø50.4 x 17 mm	36 x 45 x 15.1 mm	Ø71 x 12 mm
Weight	61 g	63g	65 g	91.5 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Mounting	Adhesive	Adhesive	Adhesive	Adhesive
Cable	RG174/U, 0.5m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG174/U, 5m <sup>1)</sup>
Connector	SMB(f) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# GPS/GLONASS Mounting



	AP-AGNSS-A602S	AP-AGNSS-A003S	AP-AGPS-TBAxT	AP-AGPS-A225T
ELECTRICAL DATA	GPS Antenna Mounting 602	GPS Antenna Mounting 003	GPS Antenna Mounting TBA	GPS Antenna Mounting Marine 225
Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS				
Bandwidth				
Polarization	RHCP	RHCP	RHCP	RHCP
Gain	28 dBi	28 dBi	35 dBi	40 dBi
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 1.5 : 1	< 1.5 : 1	< 2.0 : 1	< 1.5 : 1
Input Voltage	2.2-5 V DC	2.2-5 V DC	3.3V DC / 5 V DC	2.7 - 10 V DC

MECHANICAL DATA				
Dimensions	Ø68 x 34.8 mm	Ø46.6 x 16.3 mm	Ø77.5 x 66.2 mm	Ø66.5 x 46.1 mm
Weight	250 g	76 g	177 g	250 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 80°C	-40°C to 85°C
Mounting	Mounting	Mounting	Mounting	Mounting
Cable	RG174/U, 3m <sup>1)</sup>	RG174/U, 0.3m <sup>1)</sup>	N/A	N/A
Connector	SMA(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	TNC(f), F-type(f)	TNC(f)



1) other cable length options on request

2) for other connector options see page 40- 43

# GPS/GLONASS Mounting



	AP-AGPS-A005N	AP-AGNSS-36S	AP-AGPS-10T
ELECTRICAL DATA	<b>GPS Antenna Mounting Marine 005</b>	<b>GPS/GLONASS Antenna Mounting 36</b>	<b>GPS/GLONASS Antenna Mounting 10T</b>
Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS		1602 MHz	1602 MHz
Bandwidth		10 MHz	10 MHz
Polarization	RHCP	RHCP	RHCP
Gain	42 dBi	30 dBi	30 dBi
Impedance	50 Ω	50 Ω	50 Ω
VSWR	< 1.5 : 1	< 2.0 : 1	< 2.0 : 1
Input Voltage	3 - 5 V DC	1.6 V DC	2,5 - 5.5 V
MECHANICAL DATA			
Dimensions	Ø93.5 x 133 mm	Ø54.7 x 23.3 mm	Ø78 x 139.5 mm
Weight	507 g	95 g	120 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 80°C
Mounting	Mounting	Mounting	Mounting
Cable	RG58/U, 1m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>	RG195/U, 20m <sup>1)</sup>
Connector	N(m) <sup>2)</sup>	SMA(m) <sup>2)</sup>	TNC(f) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# WI-FI, WLAN Mounting



	AO-1GF-2412	AO-1GF-51810	AO-1GF-51815	AW-A2458G-36SR
ELECTRICAL DATA	WIFI Antenna OMNI 2412	WIFI Antenna OMNI 51810	WIFI Antenna OMNI 51815	WIFI Antenna Mounting 36
Working Frequency	2.4 GHz	5 GHz	5 GHz	2.4/5 GHz
Power handlink	50 W	50 W	50 W	10 W
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	12 dBi	10 dBi	15 dBi	0-3 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 1.5 : 1	< 1.5 : 1	< 1.5 : 1	< 2.0 : 1

MECHANICAL DATA				
Wind survival	150 mph	150 mph	150 mph	
Dimensions	Ø26 x 1050 mm	Ø26 x 520 mm	Ø26 x 740 mm	Ø52.7 x 27.4 mm
Weight	820 g	430 g	520 g	152 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Mounting	U-bolt/Mast	U-bolt/Mast	U-bolt/Mast	Mounting
Cable	N/A	N/A	N/A	RG58/U, 3m
Connector	N(f)	N(f)	N(f)	RSMA(f pin)



- 1) other cable length options on request
- 2) for other connector options see page 40- 43

# WI-FI, WLAN

## Magnetic



AW-A24G-G069SRP

### WiFi Antenna Magnetic 016W

#### ELECTRICAL DATA

Working Frequency	2.4 GHz
Power handling	10 W
Radiation	Omni-Directional
Gain	2 dBi
Polarization	Linear
Impedance	50 $\Omega$
VSWR	< 2.0 : 1

#### MECHANICAL DATA

Dimensions	$\varnothing 29.5 \times 121$ mm
Weight	54 g
Operating Temperature	-40°C to 85°C
Mounting	Magnetic
Cable	RG174, 3m <sup>1)</sup>
Connector	SMA-RP(f pin) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43



# WI-FI, WLAN Stick



	AW-A24G-2NRAB	AW-A24G-TRPK	AW-A24G-W402SRP	AW-A2458G-FSRPK
ELECTRICAL DATA	WI-FI Antenna Stick 2NRAB	WI-FI Antenna Stick TRPK	WiFi Antenna Stick 90°/180° 402	WLAN Antenna Stick FSRPK
Working Frequency	2.4 GHz	2.4 GHz	2.4 GHz	2.4/5 GHz
Power Handlink	10 W	10 W	10 W	10 W
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	2 dBi	2 dBi	3 dBi	3 dBi/5 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1

	AW-A24G-2NRAB	AW-A24G-TRPK	AW-A24G-W402SRP	AW-A2458G-FSRPK
MECHANICAL DATA	WI-FI Antenna Stick 2NRAB	WI-FI Antenna Stick TRPK	WiFi Antenna Stick 90°/180° 402	WLAN Antenna Stick FSRPK
Dimensions	32.8 x 90 x 20.9 mm	90°: 112 x 43.3 x 13 mm 180°: Ø13 x 142 mm	90°: 86 x 32,4 x 9.6 mm 180°: Ø10 x 108.5 mm	90°: 115 x 38.5 x 10 mm 180°: 138 x 20 x 10 mm
Weight	45 g	23 g	10 g	17 g
Operating Temperature	-30°C to 90 °C	-40°C to 85 °C	-40°C to 85°C	-30°C to 60°C
Mounting	Screw	Screw	Screw	Screw
Connector	N(m) 90°	TNC-RP(f pin)	SMA-RP(f pin)	SMA-RP(f pin)

# WI-FI, WLAN Stick



ELECTRICAL DATA	AW-A24G-M5SRP	AW-A2458G-SRPK
	WiFi Antenna Stick M5SRP	WiFi Antenna Stick SRPK
Working Frequency	2.4 GHz	2.4/5 GHz
Power Handlink	10 W	10 W
Radiation	Omni-Directional	Omni-Directional
Gain	5 dBi	5 dBi
Polarization	Linear	Linear
Impedance	50 $\Omega$	50 $\Omega$
VSWR	< 2.0 : 1	< 2.0 : 1

MECHANICAL DATA	AW-A24G-M5SRP	AW-A2458G-SRPK
	Dimensions	90°: 169 x 9,3 x 26.7 mm 180°: $\varnothing$ 9.3 x 186 mm
Weight	15 g	18 g
Operating Temperature	-30°C to 90°C	-40°C to 85°C
Mounting	Screw	Screw
Connector	SMA-RP(f pin)	SMA-RP(f pin)

# WI-FI, WLAN Adhesive



	AW-A24G-W001SRP	AW-A24G-G017WSRP	AW-A24G-W108SRP	AW-A24G-W017SRP
ELECTRICAL DATA	WiFi Antenna Adhesive 001	WiFi Antenna Adhesive 017W	WiFi Antenna Adhesive 108	WiFi Antenna Adhesive 017
Working Frequency	2.4 GHz	2.4 GHz	2.4 GHz	2.4/5 GHz
Power Handlink	10 W	10 W	10 W	10 W
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	2 dBi	2 dBi	3 dBi	3 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 1.5 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1

MECHANICAL DATA				
Dimensions	39.3 x 49.4 x 14.9 mm	115.6 x 21.7 x 5.8	15.5 x 126 x 8.8 mm	115.6 x 21.7 x 5.8 mm
Weight	70 g	70 g	60 g	70 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-40 to 85 °C	-40 to 85 °C
Mounting	Adhesive	Adhesive	Adhesive	Adhesive
Cable	RG174, 3m <sup>1)</sup>	RG174, 3m <sup>1)</sup>	RG174, 3m <sup>1)</sup>	RG174, 3m <sup>1)</sup>
Connector	SMA-RP(f pin) <sup>2)</sup>	SMA-RP(f pin) <sup>2)</sup>	SMA-RP(f pin) <sup>2)</sup>	SMA-RP(f pin) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# COMBINATION



ELECTRICAL DATA	AO-AKOM-36TG	AO-AKOM-B008SS	AO-AKOM-30	AO-AKOM-36
	<b>TETRA + GPS Antenna Mounting 36</b>	<b>GSM + GPS Antenna Magnetic 008</b>	<b>UMTS + GPS Antenna Adhesive 30</b>	<b>UMTS + GPS Antenna Mounting 36</b>
Working Frequency	400 MHz	900/1700/1800/ 1900/2100 MHz	900/1800/1900/ 2100 MHz	900/1700/1800/ 1900/2100 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	0 dBi	2 dBi	0 dBi	0-2 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1

## GNSS

Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS				
Bandwidth		5 MHz		
Polarization	RHCP	RHCP	RHCP	RHCP
Gain	30 dBi	28 dBi	30 dBi	30 dBi
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1
Input Voltage	2.7 - 5.5 V	2.2 - 5 V	2.7 - 5.5 V	2.7 - 5.5 V

## MECHANICAL DATA

Dimensions	Ø55 x 147 mm	Ø80.4 x 14.5 mm	Ø50 x 17 mm	Ø52.7 x 23.3 mm
Weight	340 g	150 g	158 g	133 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Mounting	Mounting	Magnetic	Adhesive	Mounting
Cable	RG174/U, 5m <sup>1)</sup> RG58, 5m	2x RG174/U, 3m <sup>1)</sup>	2x RG174/U, 5m <sup>1)</sup>	2x RG174/U, 3m <sup>1)</sup>
Connector	BNC(m), SMB(m) <sup>2)</sup>	2x SMA(m) <sup>2)</sup>	FME(f), SMA(m), FAKRA C(f), FAKRA D(f), SMA-RP(f), SMA(m) <sup>2)</sup>	FME(f), SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# COMBINATION



ELECTRICAL DATA	AO-AKOM-40	AO-AKOM-36SS	AO-AKOM-B062SS
	UMTS + GNSS Antenna Mounting 40	LTE + GPS Antenna Mounting 36	LTE + GPS Antenna Mounting 062
Working Frequency	900/1700/1800/1900/ 2100 MHz	900/1800/1900/2100 2600/2700 MHz	900/1700/1800/1900/ 2100 MHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional
Gain	0-2 dBi	0 dBi	2 dBi
Polarization	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 0	< 2.0 : 1	< 2.0 : 1

## GNSS

Centre Frequency GPS	1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS	1602 MHz		
Bandwidth	10 MHz	10 MHz	5 MHz
Polarization	RHCP	RHCP	RHCP
Gain	30 dBi	30 dBi	28 dBi
Impedance	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 0	< 2.0 : 1	< 2.0 : 1
Input Voltage	2.7 - 5.5 V	2.7 - 5.5 V	2.2 - 5 V

## MECHANICAL DATA

Dimensions	Ø71 x 12 mm	Ø52.7 x 23.3 mm	Ø50 x 48 mm
Weight	175 g	122 g	145 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Mounting	Adhesive	Mounting	Mounting
Cable	2x RG174/U, 3m <sup>1)</sup>	RG174/U, 3m RG316/U, 3m <sup>1)</sup>	RG174/U, 3m <sup>1)</sup>
Connector	FME(f), SMA(m), open <sup>2)</sup>	2x SMA(m) <sup>2)</sup>	2x SMA(m) <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43

# COMBINATION



ELECTRICAL DATA	AO-AKOM-36GW	AO-AKOMWP-36	AO-AKOM-40WP-SS	AO-AKOM-41
	WIFI + GSM Antenna Mounting 36	WIFI + GPS Antenna Mounting 36	WIFI + GPS/ GLONASS Antenna Adhesive 40WP	UMTS + WIFI + GPS Antenna Mounting 41
Working Frequency	900/1800/2100 MHz 2.4 GHz	2.4/5 GHz	2.4 GHz	900/1800/2100 MHz 2.4/5.8 GHz
Radiation	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Gain	0 dBi / 2 dBi	2 dBi	2 dBi	0 dBi / 2 dBi
Polarization	Linear	Linear	Linear	Linear
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1	< 2.0 : 1

## GNSS

Centre Frequency GPS		1575.42 MHz	1575.42 MHz	1575.42 MHz
Centre Frequency GLONASS			1602 MHz	
Bandwidth		10 MHz	10 MHz	10 MHz
Polarization		RHCP	RHCP	RHCP
Gain		30 dBi	30 dBi	30 dBi
Impedance		50 Ω	50 Ω	50 Ω
VSWR		< 2.0 : 1	< 2.0 : 1	< 2.0 : 1
Input Voltage		2.7 - 5.5 V		2.7 - 5.5 V

## MECHANICAL DATA

Dimensions	Ø54.7 x 23.3 mm	Ø54.7 x 23.3 mm	Ø71 x 12 mm	Ø80 x 25 mm
Weight	133 g	133 g	81.45 g	192 g
Operating Temperature	-40°C to 85°C	-40°C to 85°C	-40 f pin to + 85°C	-40°C to 85°C
Mounting	Mounting	Mounting	Adhesive	Mounting
Cable	RG174/U, 3m RG316/U, 3m <sup>1)</sup>	RG174/U, 5m RG316/U, 5m <sup>1)</sup>	RG316/U, 5m RG174/U, 5m <sup>1)</sup>	3x RG174/U, 5m <sup>1)</sup>
Connector	2xSMA(m),SMA-RP(f pin) <sup>2)</sup>	Open <sup>2)</sup>	2x SMA(m) <sup>2)</sup>	2x SMA(m), SMA-RP <sup>2)</sup>



1) other cable length options on request

2) for other connector options see page 40- 43





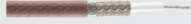




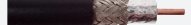
# RF ADAPTORS

## Coaxial Cables

Společnost SECTRON s.r.o. nabízí ve svém produktovém portfoliu široký výběr koaxiálních kabelů od průměru 0.8 mm až po průměr 10 mm a skladem všechny běžně používané koaxiální konektory v mnoha provedeních. Díky vlastní výrobě je společnost schopná vyrobit 500 VF kabelových redukcí denně dle zákaznických potřeb. Na základě požadavku zákazníka pro úpravy těchto parametrů obchodní oddělení přijme požadavek, případně poskytne plnohodnotné poradenství, které vyhodnotí a připraví konkrétní řešení na míru pro daný typ.

Takto připravený požadavek je zadán do výroby, kde za pomoci nejmodernějších technologií a díky bohatým zkušenostem v oboru zhotovíme VF kabelovou redukci. U antén, upravíme délku kabelu a osadíme požadovaný konektor.

SECTRON offers a wide range of coaxial cables in diameter from 0.8 to 10 mm and keeps a stock of various types of commonly used coaxial connectors in order to be able to meet customers' immediate needs. Using the latest state-of-the-art production equipment, we are capable of producing 500 pieces of RF cable adaptors per day. After receiving a customer request, our experienced sales team provides a full range of consulting services to deliver the best solution. Thereafter, the request is put into production, whereby the cable assembly is produced using the very latest processes and manufacturing technology. In regards to antennas, we can also accommodate individual orders for custom cable lengths and connectors.

Coaxial Cable				
Type	Diameter	Insertion loss		Picture
		1 GHz *	2 GHz **	
Cable 0.4 D	0.83 mm	2.89 dB	4.28 dB	
Cable 04	0.81 mm	3.07 dB	4.38 dB	
Cable 068	1.13 mm	2.00 dB	2.90 dB	
Cable 066	1.32 mm	2.08 dB	2.97 dB	
Cable088	1.37 mm	1.71 dB	2.48 dB	
RG178	1.80 mm	1.51 dB	-	
RG316	2.49 mm	0.96 dB	-	
RG174/ RF 100A HDF 100	2.80 mm	0.97/0.76 dB	-/1.10 dB	
RG58	4.95 mm	0.53 dB	-	
Cable 195	4.95 mm	0.38 dB	0.56 dB	
Cable 240	6.10 mm	0.26 dB	0.38 dB	
Cable 400	10.16 mm	0.15 dB	0.21 dB	

\* cable insertion loss (typical) for frequency 1 GHz and length of measured sample 1 meter

\*\* cable insertion loss (typical) for frequency 2 GHz and length of measured sample 1 meter

# Connector Adaptors






Součástí produktového portfolia společnosti SECTRON s.r.o. je také široká škála konektorových redukcí. Díky robustnímu designu a preciznímu provedení mají tyto komponenty výborné VF parametry i mechanickou odolnost pro použití v náročných podmínkách. Kromě redukcí pro standardně používané typy konektorů, nabízíme také modifikace a zakázkové designy pro přístroje vystavené prachu, tekutinám, nízkým teplotám a jiným náročným podmínkách. Přehled možných variant je patrný níže v tabulce.

Our product portfolio includes a wide range of connector adaptors that feature excellent electrical performance, rugged and precise design and mechanical resistance, thus enabling their use in the most demanding conditions. In addition to the adaptors for standard types of plugs and sockets, we also offer modifications and custom designs for devices that are exposed to dusty and humid conditions as well as low temperatures and other challenging conditions. The table below contains an overview of the possible variants you can use if you use our value-added supply services.

Code	Connector adaptor
AM-67-CAUF	Connector adaptor U.FL(m) FME(m) panel
AM-67-CAUS	Connector adaptor U.FL(m) SMA(f) panel
AO-FME-FME	Connector adaptor FME(m) FME(m)
AO-FMEM-SMAM	Connector adaptor FME(m) SMA(m)
AO-FMEM-SMAM-R	Connector adaptor FME(m) SMA(m)
AO-FME-SMA	Connector adaptor FME(f) SMA(f)
AO-FME-TNC	Connector adaptor FME(m) TNC(m)
AO-FM-SMR	Connector adaptor FME(m) SMA-RP(f pin)
AO-MCXM-IEC	Connector adaptor MCX(m) IEC
AO-SMAF-NM	Connector adaptor SMA(f) N(m)
AO-SMAF-SMBF	Connector adaptor SMA(f) SMB(f)
AO-SMAF-SMR	Connector adaptor SMA(f) SMA-RP(f pin)
AO-SMAM-NF	Connector adaptor SMA(m) N(f) panel
AO-SMAM-SMR	Connector adaptor SMA(m) SMA-RP(m pin)
AO-SMA-T	Connector adaptor SMA(m) 2x SMA(f)
AO-TNC-F	Connector adaptor TNC(m) F(f)



# Coaxial Connectors

Coaxial Cable		BNC			HFL	UFL
Type	Diameter	Male	Female		Female	Female
		Cable straight	Cable straight	Panel BH	Cable R/A	Cable R/A
						
Cable 0.4 D	0.83 mm					
Cable 04	0.81 mm					■
Cable 068	1.13 mm					■
Cable 066	1.32 mm				■	■
Cable 088	1.37 mm					■
RG178	1.80 mm					
RG316	2.49 mm	■		■		
RG174/RF 100A/HDF 100	2.80 mm	■		■		
RG58	4.95 mm	■	■			
Cable 195	4.95 mm	■	■			
Cable 240	6.10 mm					
Cable 400	10.16 mm					

Coaxial Cable		FAKRA				
Type	Diameter	Male			Female	
		Cable straight	Panel BH	Panel Clip	Cable Straight	Cable R/A
						
Cable 0.4 D	0.83 mm					
Cable 04	0.81 mm					
Cable 068	1.13 mm		■	■		
Cable 066	1.32 mm		■	■		
Cable 088	1.37 mm		■	■		
RG178	1.80 mm					
RG316	2.49 mm	■			■	
RG174/RF 100A/HDF 100	2.80 mm	■			■	
RG58	4.95 mm					■
Cable 195	4.95 mm					■
Cable 240	6.10 mm					
Cable 400	10.16 mm					

R/A - Right Angle RP-Reverse Polarity BH - Bulkhead Connector




# Coaxial Connectors







FME				N			
Male			Female	Male	Female		
Panel BH	Panel BH IP67	Panel Rear	Cable Straight	Cable Straight	Cable straight	Cable straight	Panel BH
■		■					
■		■					
■	■	■					
■	■	■					■
■	■	■					■
■		■	■	■	■	■	■
■		■	■	■	■	■	■
■		■	■	■	■	■	■
■			■	■	■	■	
				■	■		

## SMA

Male				Female				
Cable Straight	Cable R/A	Panel H11	Panel H8	Panel N typ	Panel R/A	Panel Switch	Cable Straight	Cable straight THD
		■						
		■						
		■	■	■				■
■	■	■	■	■	■	■		■
■	■	■	■	■	■	■		■
■	■	■			■			
■	■	■			■		■	
■	■	■					■	
■	■	■					■	
■								
■								










# Coaxial Connectors

Coaxial Cable		MMCX			MC CARD		GSC
Type	Diameter	Male		Female	Male		Female
		Cable Straight	Cable R/A	Cable Straight	Cable R/A	Cable R/A	
							
Murata 0.4 D	0.83 mm						■
Hirose040	0.81 mm						
Hirose 068	1.13 mm						
Hirose 066	1.32 mm	■	■	■	■		
Hirose 088	1.37 mm	■	■	■	■		
RG178	1.80 mm	■	■	■	■		
RG316	2.49 mm	■	■	■	■		
RG174/RF 100A/HDF 100	2.80 mm	■	■	■	■		
RG58	4.95 mm						
Cable 195	4.95 mm						
Cable 240	6.10 mm						
Cable 400	10.16 mm						

Coaxial Cable		SMA-RP					
Type	Diameter	Male central pin				Female central pin	
		Panel H11	Panel H8	Panel N typ	Cable straight	Cable straight	Cable R/A
							
Cable 0.4 D	0.83 mm						
Cable 04	0.81 mm						
Cable 068	1.13 mm			■			
Cable 066	1.32 mm	■		■		■	
Cable 088	1.37 mm	■		■		■	
RG178	1.80 mm	■					
RG316	2.49 mm	■	■			■	
RG174/RF 100A/HDF 100	2.80 mm	■	■			■	
RG58	4.95 mm	■	■		■	■	■
Cable 195	4.95 mm	■	■		■	■	■
Cable 240	6.10 mm				■	■	
Cable 400	10.16 mm						

R/A - Right Angle RP-Reverse Polarity BH - Bulkhead Connector

# Coaxial Connectors

MCX					MCX - RP	IPEX-MHX	IPEX-MHF4L	SMP
Male		Female			Female	Female	Female	Female
Cable Straight	Cable R/A	Panel BH	Panel Switch	Cable Straight	Cable straight	Cable R/A	Cable R/A	Cable R/A
								
		■					■	
■	■	■	■			■		■
■	■	■	■					■
■	■	■		■	■			■
■	■	■		■	■			■

SMB					TNC		
Male			Female		Male	Female	
Cable Straight	Cable R/A	Panel BH	Cable Straight	Cable R/A	Cable Straight	Cable Straight	Panel BH
							
							■
							■
	■	■		■			■
	■	■		■			■
	■	■		■			■
■	■	■	■	■			■
■	■	■	■	■			■
					■	■	
					■	■	

# PCB Connectors

MCX							
Male		Female					
EDGE	THD	EDGE		SMD		THD	
Straight	Straight	Straight	Straight	R/A	Straight	R/A	Straight
MME - 01	MMT - 01	MFE - 01	MFE - 02	MFS - 01	MFS - 02	MFT - 01	MFT - 02
MMCX							
Male	Female						
EDGE	EDGE			SMD	THD		
Straight	Straight	Straight	Straight	Straight	Straight	Straight	R/A
CME - 01	CFE - 01	CFE - 02	CFE - 03	CFS - 01	CFT - 01	CFT - 02	CFT - 03
MMCX		SMA			SMA-RP		
Female		Female				Male	
THD		EDGE	THD		SMB		
Straight	R/A	Straight	Panel straight	Straight	Cable straight	Straight	R/A
CFT - 04	CFT - 05	SFE - 01	SFT - 01	SFT - 02	SFT - 03	SRPMS - 01	SRPMS - 02
SMA-RP					SMB		
Male					Male		
THD					SMD		THD
Panel R/A	Panel straight	Straight	Straight	R/A	Straight	R/A	Straight
SRPMT - 01	SRPMT - 02	SRPMT - 03	SRPMT - 04	SRPMT - 05	BMS - 01	BMS - 02	BMT - 01
SMB							
Male				Female			
THD				SMD		THD	
Panel straight	Panel R/A	R/A	Cable straight	Straight	R/A	R/A	Straight
BMT - 02	BMT - 03	BMT - 04	BMT - 05	BFS - 01	BFS - 02	BFT - 01	BFT - 02