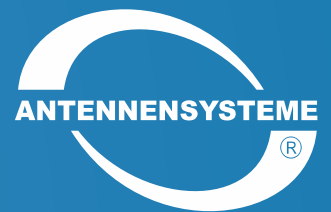


MULTIBAND
DAB/DVB-T
WLAN ISM AM/FM
LTE 868/433

ANTENNENTECHNIK
BAD BLANKENBURG GmbH



EMERGENCY SERVICES ANTENNAS | product catalogue

Antennentechnik Bad Blankenburg GmbH develops and manufactures **antenna systems** according to the highest technological and qualitative requirements and standards of the **automotive industry**, public authorities, distributive trades and specialized industrial operators. Our strong flexibility coupled with a broad product portfolio enables us to meet varying market situations and **customer demands**. The company is well established and highly respected within the antenna industry. We have invested heavily in latest measurement equipment, simulation software and industrial facilities for R&D and production. Our product portfolio includes car antennas, **integrated antenna solutions**, antennas for devices and antenna systems that cover a wide frequency-range in a wide variety of applications.

LTE



VHF



GPS



TETRA



THE ONE STOP SHOP FOR ANTENNA



Antennentechnik Bad Blankenburg is a long established company where tradition and high tech are a perfect combination.

As a medium-sized company, Antennentechnik Bad Blankenburg GmbH has modern computer-aided production facilities and the necessary measurement and test equipment. Besides the use of modern ERP solutions for production planning and optimization, highly qualified staff guarantees that all products are supplied on time and are of the highest quality.

Offering a comprehensive range of antennas as well as reacting quickly and flexibly to customers' requirements means that Bad Blankenburg can supply innovative products to trade and industry whenever required.

ATBB use innovative state-of-art techniques in antenna design, design software and modern day electronics to bring extremely high quality, high performance products to the market.

Whether you are involved in the automotive or aftermarket sector, are specifying original fit components at OEM level or require suitable conversion, we have a wide range of products to suit your needs.

DRIVING ANTENNA TECHNOLOGY FORWARDS



Antennentechnik Bad Blankenburg develops and produces antenna systems with high complexity and sophisticated innovative solutions for public authorities with safety requirements. We know the general requirements for emergency services (ESN) just like the country-specific requirements and also the different technical requirements in Europe.

Our experience from projects previously realized in different European countries enable us to implement even very specific requirements in modern antenna solutions.



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Combi Flex Roof Mount Antenna **2108.01** TETRA, GSM 900/1800,UMTS, GPS

- Radio network for TETRA Band (380-410 MHz)
- Radio network for 2G/3G
- GPS (1575,42 MHz)
- Low noise antenna rod
- only 15 mm installation depth
- Easy fit – only one hole for 3 operations

Frequency Range	TETRA	GSM 900/1800	UMTS	GPS
Frequency	380-395 MHz/ 406-410 MHz	890-960 MHz 1710-1880 MHz	1900-2170 MHz	1575,42 MHz
Gain	2 dBi	2 dBi	2 dBi	32 dBic typ.
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
max. Power	25 W	4 W	4 W	-
Isolation	≥ 20 dB	≥ 20 dB	≥ 20 dB	≥ 35 dB
VSWR	≤ 1,5 : 1/ ≤ 2,0 : 1	≤ 2,0 : 1	≤ 2,0 : 1	≤ 1,5 : 1
Amplification LNA	-	-	-	28±3 dB
Noise Figure	-	-	-	1,7 typ.
Power Supply	-	-	-	+ 3,3...5 V 15...35 mA
Cable R174	≈ 0,195 m		≈ 0,195 m	≈ 0,15 m
Connector	FAKRA (m) - I		FAKRA (m) - I	FAKRA (m) - C



Roof Mount Antenna **2122.01** TETRA (380-430 MHz)

- Mobile phone on TETRA Band (380-430 MHz)
- Small installation depth (15 mm)
- Easy fit–only one hole for 2 functions

Frequency Range	TETRA
Frequency	380-430 MHz
Impedance	50 Ω
Gain	2 dBi
Max. Power	20 W
Return loss	≈ 10 dB
VSWR	≤ 2,0 : 1
Cable RG 174	≈ 160 mm
Connector	FME (m)



Roof Mount Antenna **3786.01** TETRA, GPS

- TETRA networks
- Active GPS antenna (Phantom Power supply)
- Small installation depth (15 mm)
- Easy fit – one hole for 2 functions
- Used for radio network and navigation systems

Frequency Range	TETRA	GPS
Frequency	380 - 430 MHz	1575,42 MHz
Gain	2 dBi	32 dB typ.
Impedance	50 Ω	50 Ω
VSWR	Typ. ≤ 1,5 : 1 Max. ≤ 2,5 : 1	≤ 1,7 : 1
Max. Power	25 W	-
Amplification LNA	-	28 ±3 dB
Noise Figure	-	1,7 dB typ.
Power Supply	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	≈ 250 mm	≈ 150 mm
Connector	FME (m)	FME (f)



Combi Roof Mount Antenna **3784.01** GSM 900/1800, UMTS, GPS

- Mounting at new hole images of MB+VW/ Audi possible (Seal adapter optional available)
- Cellular networks for 2G/3G
- Active GPS antenna (Phantom Power supply)
- Small installation depth (16,5 mm)

Frequency Range	GSM900/1800	UMTS	GPS
Frequency	880-960 MHz/ 1710-1880MHz	1900-2200 MHz	1575,42 MHz
Impedance	50 Ω	50 Ω	50 Ω
Gain	2 dBi	2 dBi	32 dBic typ.
Max. Power	4 W	4 W	-
VSWR	typ. ≤ 2 : 1 max. ≤ 3 : 1	typ. ≤ 2 : 1 max. ≤ 3 : 1	≤ 1,5 : 1
Amplification LNA	-	-	28 ± 3 dB
Noise Figure	-	-	1,7 dB typ.
Power Supply	-	-	+3,3...5,0 V 15...40 mA
Cable RG 174	180 mm		180 mm
Connector	FAKRA (m)-D		FAKRA (m)-C



Combi Roof Mount Antenna **3765.01** TETRA, GSM 900/1800, UMTS, GPS LTE 800/1800/2100/2600

- Mobile radio in the TETRA Band
- Cellular radio in the 2G/3G/4G Range
- Cellular radio in the LTE Range
- Active GPS Antenna (Phantom Power Supply)
- Low wind noise antenna rod
- Small installation depth (15 mm)
- Only one hole for 3 operations

Frequency Range	TETRA	LTE 800	GSM 900	GSM 1800, UMTS, LTE 1800/2100	LTE 2600	GPS
Frequency	380-410 MHz	790-862 MHz	890-960 MHz	1710-2170 MHz	2500-2690 MHz	1575,42 MHz
Gain	2 dBi	2 dBi	2 dBi	2 dBi	2 dBi	32 dBic typ.
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	≤ 2,5 : 1	≤ 3,5 : 1	≤ 2,0 : 1	≤ 2,5 : 1	≤ 3,5 : 1	≤ 1,5 : 1
Max. Power	25 W	25 W	4 W	4 W	4 W	-
Isolation	≥ 20 dB	≥ 20 dB	≥ 20 dB	≥ 20 dB	≥ 20 dB	≥ 35 dB
Amplification LNA	-	-	-	-	-	28 ± 3 dB
Noise figure	-	-	-	-	-	1,7 dB typ.
Power Supply	-	-	-	-	-	+ 3,3...5,0V 15...40 mA
Cable RG 174	190 mm	230 mm				150 mm
Connector	FAKRA (m)-I	FAKRA (m)-D				FAKRA (m)-C



Combi Roof Mount Antenna **3742.02** GSM 900/1800, LTE 800/1800/2600, UMTS, GPS

- Cellular in 2G/3G/4G
- active GPS antenna (phantom power supply)
- small installation depth (15mm)
- reduced installation time - only one hole for 5 functions
- Used for: Cellular networks, Navigation systems, Telematic and Fleet Management

Frequency Range	GSM900/1800	UMTS	LTE 800/1800	LTE 2600	GPS
Frequency	824-960 MHz	1900- 2170 MHz	791-862/ 1710-1880 MHz	2500-2690 MHz	1575,42 MHz
Gain	0 dBi	2 dBi	2 dBi	2 dBi	32 dBic typ.
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	≤ 1,5 : 1	≤ 1,5 : 1	≤ 1,5 : 1	≤ 2,5 : 1	≤ 1,5 : 1
max. Power	4 W	4 W	4 W	4 W	-
Amplification LNA	-	-	-	-	28 ± 3 dB
Noise Figure	-	-	-	-	1,7 dB typ.
Power Supply	-	-	-	-	+3,3...5,0 V 15...35 mA
Cable RG 174	240 mm				200 mm
Connector	FAKRA(m)-G				FAKRA(m)-H



Combi - Antenna **4736.02** TETRA, GSM 850/900/1800, UMTS, LTE, WLAN/Wi-Fi (2,4/5,0 GHz), GPS/GLONASS

- Radio network for TETRA Band (380 – 410 MHz)
- 2 connectors for mobile 2G/3G/4G (MIMO)
- 2 connectors for WLAN/Wi-Fi (MIMO)
- Active GPS/GLONASS Antenna (Phantom Power Supply)
- Dimension 200x95x70 (LxWxH)

Frequency Range	TETRA	TETRA	LTE 700/800 GSM 850/900	LTE 1800/2100 GSM 1800, UMTS	LTE 2600	WLAN/ Wi-Fi	GPS/GLONASS
Frequency	380 – 395	406 - 410	698 – 960	1710 – 2170	2500 – 2690	2400 – 2485 4900 – 5900	1575,42 / 1602 – 1610
Amplification	-	-	-	-	-	-	28 ±3 dB
Gain	-3 dBi	2 dBi	2 dBi	2 dBi	2 dBi	2 dBi	32 dBic typ.
Polarization	vertical	vertical	vertical	vertical	vertical	vertical	RHCP
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	≤ 2,0 : 1	≤ 2,5 : 1	≤ 3,0 : 1	≤ 2,5 : 1	≤ 2,5 : 1	≤ 2,5 : 1	≤ 1,5 : 1
max. Power	10 W	10 W	4 W	4 W	4 W	4 W	-
Isolation	≥ 20 dB Radio/Mobile	≥ 20 dB Radio/Mobile	≥ 20 dB Radio/Mobile	≥ 20 dB Radio/Mobile	≥ 20 dB Radio/Mobile	≥ 20 dB Radio/Mobile	≥ 35 dB
Noise Figure	-	-	-	-	-	-	1,7 dB
Power Supply	+ 12 V * 25 mA, typ.	+ 12 V * 25 mA, typ.	-	-	-	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	140 mm			2x 300 mm		2x 170 mm	200 mm
Connector	FAKRA(m)-I			2xFAKRA(m)-D		2xFAKRA(m)-H	FAKRA(m)-C



Combi - Antenna **4736.04** GSM 850/900/1800, UMTS, LTE 700/800/1800/2100/2600, WLAN/Wi-Fi, GPS/GLONASS

- 1 connector for mobile 2G/3G/4G
- 1 connector for WLAN/Wi-Fi
- Dimension 200x95x70 (LxWxH)
- Active GPS/GLONASS Antenna (Phantom Power Supply)

Frequency Range	LTE 700/800 GSM 850/900	LTE 1800/2100 GSM 1800, UMTS	LTE 2600	WLAN/ Wi-Fi	GPS/GLONASS
Frequency	698 – 960	1710 – 2170	2500 – 2690	2400 – 2485 4900 – 5900	1575,42 / 1602 – 1610
Amplification	-	-	-	-	28 ±3 dB
Gain	2 dBi	2 dBi	2 dBi	2 dBi	32 dBic typ.
Polarization	vertical	vertical	vertical	vertical	RHCP
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	≤ 3,0 : 1	≤ 2,0 : 1	≤ 2,0 : 1	≤ 2,5 : 1	≤ 1,5 : 1
max. Power	4 W	4 W	4 W	4 W	-
Isolation	≥ 20 dB Radio/Mobile	≥ 20 dB Radio/Mobile	≥ 20 dB Radio/Mobile	≥ 20 dB Radio/Mobile	≥ 35 dB
Noise Figure	-	-	-	-	1,7 dB
Power Supply	-	-	-	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	500 mm			500 mm	500 mm
Connector	FAKRA(m)-H			2xFAKRA(m)-G	FAKRA(m)-C



Combi - Antenna **4736.05** GSM 850/900/1800, UMTS, LTE 700/800/1800/2100/2600, WLAN/Wi-Fi, GPS/GLONASS

- 2 connectors for mobile 2G/3G/4G (MIMO)
- Active GPS/GLONASS Antenna (Phantom Power Supply)
- Dimension 200x95x70 (LxWxH)

Frequency Range	LTE 700/800 GSM 850/900	LTE 1800/2100 GSM 1800, UMTS	LTE 2600	GPS/GLONASS
Frequency	698 – 960	1710 – 2170	2500 – 2690	1575,42 / 1602 – 1610
Amplification	-	-	-	28 ±3 dB
Gain	2 dBi	2 dBi	2 dBi	32 dBic typ.
Polarization	vertical	vertical	vertical	RHCP
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	≤ 3,0 : 1	≤ 2,0 : 1	≤ 2,0 : 1	≤ 1,5 : 1
max. Power	4 W	4 W	4 W	-
Isolation	-	-	-	≥ 35 dB
Noise Figure	-	-	-	1,7 dB
Power Supply	-	-	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	2x200 mm			290 mm
Connector	2xFAKRA(m)-D			FAKRA(m)-C



Combi Flex Roof Mount Antenna **3708.01** 4m-Band, 2m-Band, TETRA, GSM 900/1800, UMTS, GPS

- Radio network for 4m Band (74-87,5 MHz), adjustable on diplexer
- Radio network for 2m Band (167-174 MHz), adjustable on diplexer
- Radio network for TETRA Band (380-410 MHz)
- External antenna splitter for 4m Band/ 2m Band/TETRA
- Cellular radio for Dual Band 2G and 3G
- Active GPS antenna (Phantom Power Supply)

Frequency Range	4m	2m	TETRA	GSM 900/1800 UMTS 3G	GSM 900/1800 UMTS 3G	GPS
Frequency	74-87,5 MHz	167-174 MHz	380-410 MHz	890-960 MHz 1710-1880 MHz	1900-2170 MHz	1575,42 MHz
Spectrum	50 Kanäle*	-	-	-	-	-
Gain	- 2 dBi	2 dBi	2 dBi	2 dBi	2 dBi	32 dBic typ.
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	≤ 1,5 : 1	≤ 1,7 : 1	≤ 1,5 : 1	≤ 2 : 1	≤ 3,0	≤ 1,5 : 1
max. Power	25 W	25 W	25 W	4 W	4 W	-
Isolation	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB	-
Amplification LNA	-	-	-	-	-	28 ± 3 dB
Noise Figure	-	-	-	-	-	1,7 dB typ.
Power Supply	-	-	-	-	-	+3,3...5,0 V 15...35 mA
Cable RG 174	-	-	-	230 mm		150 mm
Connector	FME (m)			FAKRA (m)-D		FAKRA (m)-C

*VSWR < 1,5 (continuously); 2,5 m RG58 Connection cable included, connection cable lengths allowed: 1,25 m, 3,75 m and 5,0 m on request



Combi Flex Roof Mount Antenna **3709.01** 4m-Band, 2m-Band, TETRA, GSM 900/1800, UMTS, GPS

- Radio network for 4m Band (74-87,5 MHz), adjustable on diplexer
- Radio network for 2m Band (167-174 MHz), adjustable on diplexer
- Radio network for TETRA Band (380-410 MHz)
- External antenna splitter for 4m Band/ 2m Band/TETRA
- Cellular radio for Dual Band 2G and 3G
- Active GPS antenna (Phantom Power Supply)

Frequency Range	4m	2m	TETRA	GSM 900/1800 UMTS 3G	GSM 900/1800 UMTS 3G	GPS
Frequency	74-87,5 MHz	167-174 MHz	380-410 MHz	890-960 MHz 1710-1880 MHz	1900-2170 MHz	1575,42 MHz
Spectrum	50 Kanäle*	-	-	-	-	-
Gain	- 2 dBi	2 dBi	2 dBi	2 dBi	2 dBi	32 dBic typ.
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	≤ 1,5 : 1	≤ 1,7 : 1	≤ 1,5 : 1	≤ 2 : 1	≤ 3,0	≤ 1,5 : 1
max. Power	25 W	25 W	25 W	4 W	4 W	-
Isolation	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB
Amplification LNA	-	-	-	-	-	28 ± 3 dB
Noise Figure	-	-	-	-	-	1,7 dB typ.
Noise Figure	-	-	-	-	-	+3,3...5,0 V 15...35 mA
Cable RG 174	-	-	-	230 mm		150 mm
Connector	FME (m)			FAKRA (m)-D		FAKRA (m)-C

*VSWR < 1,5 (continuously); 2,5 m RG58 Connection cable included, connection cable lengths allowed: 1,25 m, 3,75 m and 5,0 m on request. Don't cut the Broadcasting (FAKRA-Code A) cable!



Combi Flex Roof Mount Antenna **3710.01** TETRA, GSM 900/1800, UMTS, GPS

- Radio network for TETRA band (380-410 MHz)
- Cellular radio network for Cellular radio for Dual Band 2G and 3G
- Active GPS antenna (Phantom Power supply)
- Small installation depth (15 mm)
- Easy fit – only one hole for 3 functions
- Used for: cellular networks, navigation system, BOS Services (digital)

Frequency Range	TETRA	GSM 900	UMTS	GPS
Frequency	380-410 MHz	890-960 MHz 1710-1880 MHz	1900-2170 MHz	1575,42 MHz
Gain	2 dBi	2 dBi	2 dBi	32 dBic typ.
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Max. Power	25 W	4 W	4 W	-
Isolation	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB
Return loss	≈ 14 dB	≈ 12 dB	≈ 10 dB	≈ 12 dB
Amplification LNA	-	-	-	28 ± 3 dB
Noise Figure	-	-	-	1,7 dB typ.
Power Supply	-	-	-	+ 3,3...5,0V 15...40 mA
Cable RG 174	≈ 195 mm	≈ 230 mm		≈ 150 mm
Connector	FAKRA (m)-I	FAKRA (m)-D		FAKRA (m)-C



Combi Flex Roof Mount Antenna **3702.01** TETRA; Radio (active); GPS

- Radio network for TETRA Band (380-400 MHz)
- Active Broadcast AM/FM reception; 12 V phantom power supply or through separate DIN connector
- Active GPS antenna (Phantom Power supply)
- Low wind noise antenna rod
- Small installation depth (15 mm)
- Easy fit – only one hole for 3 functions

Frequency Range	TETRA	AM	FM	GPS
Frequency	380-400 MHz	0,14-14 MHz	87,5- 108 MHz	1575,42 MHz
Gain	2 dBi	-	-	32 dBic typ.
Isolation (Radio/Telephone)	> 25 dB	> 25 dB	> 25 dB	-
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	≤ 2:1	≤ 3 :1	≤ 3 :1	≤ 1.7:1
Max. Power	25 W	-	-	-
Amplification LNA	-	≈ 6 dB	≈ 15 dB	28 ±3 dB
Noise Figure	-	-	3,5 dB typ.	1,7 dB typ.
Power Supply	-	+ 12 V; 25 mA typ.	+ 12 V; 25 mA typ.	+ 3,3...5,0V 15...40 mA
Cable RG 174	200 mm	110 mm		150 mm
Connector	FME (m)	M 10 x 0,75		FME (m)



Combi Flex Roof Mount Antenna **3740.01** TETRA, GSM 900/1800, UMTS, GPS

- Radio network for TETRA Band (380-410 MHz)
- Radio network for 2G/3G band
- Active GPS antenna (Phantom Power Supply)
- Low wind noise antenna rod
- Small installation depth (16,5 mm)
- Easy fit – only one hole for 3 functions
- Used for navigation system and BOS Services

Frequency Range	TETRA	GSM900	GSM1800	UMTS	GPS
Frequency	380-410 MHz	890-960 MHz	1710-1880 MHz	1900-2200 MHz	1575,42 MHz
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
Gain	2 dBi	2 dBi	2 dBi	2 dBi	32 dBic typ.
Max. Power	25 W	4 W	4 W	4 W	-
VSWR	≤ 1,5 : 1	≤ 2,0 : 1	≤ 2,0 : 1	≤ 3,0 : 1	≤ 1,5 : 1
Amplification LNA	-	-	-	-	28 ± 3 dB
Noise Figure	-	-	-	-	typ. 1,7 dB
Power Supply	-	-	-	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	230 mm		195 mm		150 mm
Connector	FME (m)		FAKRA (m)-D		FAKRA (m)-C



Combi Flex Roof Mount Antenna **3745.01** TETRA, GPS

- Mounting at new hole images of MB+VW/ Audi possible (Seal adapter optional available)
- Radio network for TETRA Band (380-410 MHz)
- Active GPS antenna (Phantom Power supply)
- Low wind noise antenna rod
- Small installation depth (16,5 mm)
- Easy fit – only one hole for 2 functions
- Used for navigation system and BOS Services

Frequency Range	TETRA	GPS
Frequency	380-410 MHz	1575,42 MHz
Impedance	50 Ω	50 Ω
Gain	4 dBi	32 dBic typ.
Max. Power	25 W	-
VSWR	≤ 2 : 1	≤ 1,5 : 1
Amplification LNA	-	28 ± 3 dB
Noise Figure	-	typ. 1,7 dB
Power Supply	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	230 mm	150 mm
Connector	FME (m)	FAKRA (m)-C



Combi Roof Mount Antenna **2115.01** 2m/70cm

- Radio network through VHF / UHF Band
- Low noise rod
- Only 15 mm installation depth
- Easy to mount
- Frequency can be adjusted by shortening the rod

Frequency Range	2m	70cm
Frequency	144-174 MHz	410-470 MHz
Gain	2 dBi	4 dBi
Impedance	50Ω	50Ω
VSWR	≤ 1,5:1 *	≤ 1,5:1 *
Max. Power	25 W	25 W
Cable RG 174	0,2 m	
Connector	FAKRA(m)-I	

* At resonance frequency



Combi Roof Mount Antenna **3748.01** 2m/70cm, GSM 900/1800, UMTS, GPS

- Radio network for VHF / UHF Band
- Radio network for 2G/3G
- Active GPS Antenna (Phantom Power Supply)
- Low wind noise antenna rod
- Small installation depth (15 mm)
- Easy to install
- Only one hole for 3 operations
- Rod adjustable by cut

Frequency Range	2m	70cm	GSM	UMTS	GPS
Frequency	144-174 MHz	410-470 MHz	890-960 / 1710-1880 MHz	1900-2200 MHz	1575,42 MHz
Gain	2 dBi	2 dBi	2 dBi	2 dBi	32 dBic typ.
Impedance	50Ω	50Ω	50Ω	50Ω	50Ω
VSWR	≤ 1,7 : 1	≤ 1,5 : 1	≤ 2,0 : 1	≤ 3,0 : 1	≤ 1,5 : 1
Max. Power	25 W	25 W	4 W	4 W	-
Isolation (mobile Radio)	≥ 15 dB	≥ 10 dB	≥ 20 dB	≥ 20 dB	-
Amplification LNA	-	-	-	-	28 ± 3 dB
Noise Figure	-	-	-	-	1,7 dB typ.
Power Supply	-	-	-	-	+ 3,3...5 V 15...35 mA
Cable RG 174	190		230 mm		230 mm
Connector	FAKRA (m)-I		FAKRA (m)-D		FAKRA (m)-D



Roof Mount Antenna **4437.01** GPS (active)

- Power supply of amplifier via coaxial cable unit only
- Bolt down or screw down antenna with central fastening
- Suitable for panel thickness up to 5 mm
- UV resistant plastic housing
- Fully seals to IP 65

Frequency Range	GPS
Frequency	1575,42 MHz
Gain (only patch-antenna)	4 dBi
Amplification	≈ 28 dB
Impedance	50 Ω
Noise Figure	≤ 2,0 dB
Return loss	≤ 1,5 : 1
Power supply	+ 3,3...5 V, 19...28 mA
Cable RG 174	2,6 m
Connector	FME (f)



Combi Roof Mount Antenna **3744.01** TETRA, GPS

- Mounting at new hole patterns of MB+VW/
Audi possible (Seal adapter optional available)
- Radio network for TETRA Band (380-410 MHz)
- Active GPS antenna (Phantom Power supply)
- Small installation depth (16,5 mm)
- Used for navigation system and TETRA Services
- TETRA use only with matching unit 4727.01

Frequency Range	TETRA	TETRA	GPS
Frequency	380-400 MHz	406-410 MHz	1575,42 MHz
Impedance	50 Ω	50 Ω	50 Ω
Gain	-3 dB*	-3 dB*	32 dBic typ.
Max. Power	10 W	10 W	-
VSWR	≤ 2 : 1	≤ 3,5 : 1	≤ 1,5 : 1
Amplification LNA	-	-	28 ± 3 dB
Noise Figure	-	-	typ. 1,7 dB**
Power Supply	-	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	230 mm		150 mm
Connector	FME (m)		FAKRA (m)-C



Combi Roof Mount Antenna **3771.01** TETRA, GSM 900/1800, UMTS, GPS

- Mounting at new hole patterns of MB+VW/
Audi possible (Seal adapter optional available)
- Radio network for TETRA Band (380-410 MHz)
- Active GPS antenna (Phantom Power supply)
- Cellular networks for 2G/3G
with diagnostic function
- Small installation depth (16,5 mm)
- TETRA use only with matching unit 4727.01

Frequency Range	TETRA	GSM1800	UMTS	GPS
Frequency	380-400 MHz/ 406-410 MHz	880-960 MHz/ 1710-1880MHz	1900-2200 MHz	1575,42 MHz
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Gain	-3 dB*	2 dBi	2 dBi	32 dBic typ.
Max. Power	10 W	4 W	4 W	-
VSWR	≤ 2 : 1/≤ 3,5 : 1	≤ 2 : 1	≤ 2 : 1	≤ 1,5 : 1
Amplification LNA	-	-	-	28 ± 3 dB
Noise Figure	-	-	-	typ. 1,7 dB
Power Supply	-	-	-	+3,3...5,0 V 15...40 mA
Cable RG 174	210 mm	180 mm		150 mm
Connector	FME (m)	FAKRA (m)-D		FAKRA (m)-C

*referring to ¼ λ monopole



Roof Mount Antenna **3768.03** GSM 850/900/1800, UMTS, LTE 800/1800/2100/2600

- Mobile telephone 2G/3G and LTE 800/1800/2100/2600
- Small installation depth (15 mm)
- Easy to install
- Diagnosis by 10 kΩ

Radio Networks	LTE 800, GSM 850/900	LTE 1800/2100, GSM 1800, UMTS	LTE 2600
Frequency	790-960 MHz	1710-2170 MHz	2500-2690 MHz
Polarization	vertical	vertical	vertical
Pattern	omnidirectional azimuthal	omnidirectional azimuthal	omnidirectional azimuthal
Gain	2 dBi	2 dBi	-
VSWR	≤ 2,0 : 1	≤ 2,0 : 1	≤ 2,0 : 1
Impedance	50 Ω	50 Ω	50 Ω
Degrees of protection	IP6K6K/ IP6K9K	IP6K6K/ IP6K9K	IP6K6K/ IP6K9K
Temperature range operation storage	-	-	-40...+80°C -40...+95°C (2h)
Cable	0,24 m DACAR 302		
Connector	FAKRA (m)-D		



Combi Flex Roof Mount Antenna **3767.04** 4m, 2m, TETRA, GPS, GSM 900/1800, UMTS, LTE 800/1800/2100/2600

- Radio network for 4m Band, adjustable on diplexer
- Radio network for 2m Band
- Radio network for TETRA Band
- Active GPS antenna (Phantom power supply)
- External splitter for 4m Band/ 2m Band/TETRA
- Low wind noise rod
- Small installation depth (15 mm)

Frequency Range	4m		2m		TETRA	GSM 900/1800 UMTS	LTE	GPS
	UB	OB	UB	OB				
Frequency	74,215 77,475	84,015 87,255	165,210 169,380	169,810 173,980	380-395 406-410	890-960 1710- 1880 1900-2170	790-862 / 1900-2170 2500-2690	1575,42
Gain	- 2 dBi	- 2 dBi	2 dBi	2 dBi	2 dBi	2 dBi	2 dBi	32 dBic typ.
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	≤ 2,0 : 1	≤ 3,5 : 1	≤ 1,7 : 1	≤ 2,0 : 1	≤ 2,0 : 1	≤ 2,0 : 1	≤ 3,0 : 1 / ≤ 2,0 : 1	≤ 1,5 : 1
Max. Power	25 W	25 W	25 W	25 W	25 W	4 W	4 W	-
Isolation	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB
Diagnostic Function	-	-	-	-	-	10 kOhm	10 kOhm	-
Amplification	-	-	-	-	-	-	-	28 ± 3 dB
Noise Figure	-	-	-	-	-	-	-	1,7 dB typ.
Power Supply	-	-	-	-	-	-	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	-	-	-	-	-	230 mm		230 mm
Connector	FME (m)		FME (m)		FME (m)	FAKRA (m)-D		FAKRA (m)-C

* Permitted connection cables between antenna and diplexer: 1,25 m; 2,5 m; 3,75 m and 5,0 m on request.



Combi Flex Roof Mount Antenna **3769.01** TETRA, GPS

- Radio network for TETRA Band (380-410 MHz)
- Active GPS antenna (Phantom Power supply)
- High flexible antenna rod
- Small installation depth (16,5 mm)
- Easy fit – only one hole for 2 functions
- Used for navigation system and BOS Services

Frequency Range	TETRA	GPS
Frequency	380-410 MHz	1575,42 MHz
Impedance	50 Ω	50 Ω
Gain	4 dBi	32 dBic typ.
Max. Power	25 W	-
VSWR	≤ 2 : 1	≤ 1,5 : 1
Amplification LNA	-	28 ± 3 dB
Noise Figure	-	1,7 dB typ.
Power Supply	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	230 mm	150 mm
Connector	FME (m)	SMA (m)



Combi Flex Roof Mount Antenna **3781.01** TETRA, GPS

- Radio network for TETRA Band (380-410 MHz)
- Active GPS antenna (Phantom Power supply)
- Whip angle adjustable from -90° ... 90°
(Note: VSWR of rod inclination dependent)
- Small installation depth (16,5 mm)
- Easy fit – only one hole for 2 functions
- Used for navigation system and BOS Services

Frequency Range	TETRA	GPS
Frequency	380-410 MHz	1575,42 MHz
Impedance	50 Ω	50 Ω
Gain	4 dBi	32 dBic typ.
Max. Power	25 W	-
VSWR	≤ 2 : 1 *	≤ 1,5 : 1
Amplification LNA	-	28 ± 3 dB
Noise Figure	-	1,7 dB typ.
Power Supply	-	+ 3,3...5,0 V 15...35 mA
Cable RG 174	230 mm	150 mm
Connector	FME (m)	SMA (m)



Combi Roof Mount Antenna **3939.01** 4m, 2m, TETRA

- Radio network for TETRA-Band (380-410 MHz)
- Radio network 4m-Band (74-87,5 MHz), adjustable on diplexer
- Small installation depth (16,5 mm)
- Radio network 2m-Band (167-174 MHz), adjustable on diplexer
- Used for navigation system and TETRA Services
- TETRA use only with matching unit 4727.01

Frequency Range	4m	2m	TETRA
Frequency	74-87,5 MHz	167-174 MHz	380-410 MHz
Spectrum	50 Kanäle*	-	-
Gain	-2 dBi	2 dBi	-2 dBi
Impedance	50 Ω	50 Ω	50 Ω
Max. Power	25 W	25 W	25 W
VSWR	≤ 1,5 : 1	≤ 1,7 : 1	≤ 1,7 : 1
Cable RG 58		2,75 m	
Connector		FME (m)	

* VSWR < 1,5 : 1 (continuous); Especially suitable for BOS Services



Mount Antenna **4278.01** VHF (55...550 MHz)

A 1/4-VHF-antenna for Frequency range 55-550 MHz.
Antenna rod can be shortened according to the desired frequency

Frequency Range	55-550 MHz
Radiation Characteristic	omnidirectionally
Impedance	50 Ω
Gain	0 dB*
Max. Power	100 W
Cable RG 58	4 m
Connector	DV 27

* referred to 1/4 rod



Roof Mount Antenna **4294.01** 4m-Band, 2m-Band

- Radio network for 4m-Band and 2m, tunable diplexer
- external antenna splitter for 4m-Band/ 2m-Band
- Stainless steel rod, Whip angle adjustable
- Small installation depth

Frequency Range	4m	2m
Frequency	73-87,5 MHz	167-174 MHz
Spectrum	-	lower band / upper band
Gain	0 dB*	0 dB*
Impedance	50 Ω	50 Ω
VSWR	≤ 1,5 : 1	≤ 2,0 : 1
Max. Power	25 W	25 W
Connector		FME (m)

* Referring to 1/4 element



Roof Mount Antenna **4296.01** TETRA 3dB

Frequency Range	TETRA
Frequency	380-410 MHz
Impedance	50 Ω
Gain	3 dB *
Max. Power	25 W
VSWR	≤ 2,0:1
Cable RG 174	~4,0 m
Connector	FME (f)

* Referring to 1/4 element



Roof Mount Antenna **4299.01** 4m/2m- Band, TETRA 3dB; GPS

Frequency Range	4m	2m	TETRA	GPS
Frequency	73-87,5 MHz	167-174 MHz	380-410 MHz	1575,42 MHz
Spectrum	-	lower band / upper band	-	-
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Gain	0 dB *	0 dB *	3 dB *	30 dBic typ
Max. Power	25 W	25 W	25 W	-
VSWR	≤ 1,5 : 1	≤ 2,0 : 1	≤ 2,0 : 1	≤ 1,5 : 1
Amplification LNA	-	-	-	28 ±3 dB
Noise figure	-	-	-	1,7 dB typ.
Power Supply	-	-	-	+3,0...5,0 V, 10...30 mA
Cable RG 174	-	-	-	200 mm
Connector	FME(m)			

* Referring to 1/4 element



Stationary Antenna **4937.01** TETRA

- Suitable for indoor and outdoor use
- Radiator placed inside a shrink tube
- HF-Cable fitted directly to the aerial
- Avoid metal surfaces near the antenna
- particularly suitable for covered installation on / in vehicles
- in plastic environment outside and inside
- in connection to TETRA – Diplexer 4606.01 becomes a 2 – function antenna system

Frequency	380 – 470 MHz
Gain	2 dBi
Impedance	50 Ω
VSWR	≤ 2 : 1
Return loss	≈ 10 dB
Power	max. 20W
Temperature Range	-40° ... +70°C
Weight	0,4 kg
Cable RG 58	5,0 m
Connector	FME (m)



Magnetic Mount Antenna **3406.03** GPS (active)

- Power supply only through coaxial cable of GPS unit (Phantom power supply)
- Fasten with magnetic clamp to horizontal ferromagnetic surfaces
- Bidirectional traffic telematic systems
- Navigation systems and Location transmitting
- Safety and emergency signaling
- Fleet management

Frequency Range	GPS
Frequency	1575,42 MHz
Polarization	RHCP (Right Hand Circular Polarisation)
Gain (Passive patch antenna only)	≈ 0 dBic, Elevation 90°
Amplification LNA	28 ±3 dB
Noise Figure	1,7 typ.
Output Impedance	50 Ω
VSWR	≤ 2 : 1
Bandwidth	± 1,023 MHz
Phantom Power Supply	+ 3,0...5,0 V 10...35 mA
Degree of protection (IP-Code)	IP 64
Cable RG 174	5,0 m
Connector	SMA(m)



Magnetic Mount Antenna **3342.01** TETRA

- Radiator housed in plastic moulding to protect it from dirt and corrosion
- Optimal transmission and reception on the car roof

Frequency Range	TETRA
Frequency	380-430 MHz
Gain	2 dBi
Impedance	50 Ω
VSWR	≤ 2 : 1
Max. Power	25 W
Cable RG 174	≈ 2,5 m
Connector	FME (f)



Window Clip Antenna **3376.05** TETRA 3 dB

- Fasten on sliding glass panel of car
- High grade stainless steel clip with low thickness (guarantees full window closing)
- Rubber stoppers on clip inside (prevents scratching)
- Very good omnidirectional properties given by radiator's high position
- Reduces radiation into the car

Frequency Range	TETRA
Frequency	380-430 MHz
Gain	≈ 5 dBi
VSWR	≤ 2,5 : 1
Impedance	50 Ω
Max. Power	25 W
Cable RG 174	≈ 2,7 m
Connector	FME (f)



Flex Roof Mount Antenna **3718.01** TETRA 3dB

- Radio network for TETRA Band (380-410 MHz)
- Low wind noise antenna rod
- Small installation depth (15 mm)
- Easy fit – only one hole for 3 operations

Frequency Range	TETRA
Frequency	380-430 MHz
Impedance	50 Ω
Gain	5 dBi
Max. Power	25 W
Return loss	≈ 14 dB
VSWR	≤ 1,5 : 1
Cable RG 174	195 mm
Connector	FME (m)



Fixed Station Antenna **4930.01** TETRA

- Suitable for external and internal use
- Radiator protected with plastic tube
- RF cable is connected directly to antenna element
- Avoid metallic surfaces close to the antenna
- Improvement of transmission and reception quality in low signal areas or for feeding areas which have poor signal quality

Frequency	380 – 470 MHz
Gain	2 dBi
Impedance	50 Ω
VSWR	≤ 2 : 1
Return loss	≈ 10 dB
Power	max. 20W
Temperature Range	-40° ... +70°C
Weight	0,4 kg
Wind Load	48 N (140 km/h)
Cable RG 58	5,0 m
Connector	FME (f)



Coupler **4322.01** AM, FM, DAB (Band III), TETRA, GSM900/1800

A passiv diplexer with following features:

- Splitting the antenna signal into radio/DAB and mobile network
- Suitable for all Combi/ Combiflex antennas

Frequency Range	AM, FM, DAB (Band III)	TETRA	GSM900/1800
Frequency	0,15-240 MHz	380-430 MHz	380-430 MHz
Impedance	50 Ω	50 Ω	50 Ω
VSWR	≤ 2,0 : 1	≤ 2,0 : 1	≤ 2,0 : 1
Max. Power	15 W	15 W	15 W
Insertion Loss	≤ 1,0 dB	≤ 0,5 dB	≤ 1,0 dB
Stop Band Attenuation (Radio/mobile network)	-	-	-
Connector	FAKRA (m)-Z	FAKRA (m)-Z	FAKRA (m)-Z



Diplexer **4722.01** TETRA/ 2m/ 4m

- Splitter for TETRA, 2m-band and 4m-band
- 4m-band tunable according to regulation
- 2m-band fixed from factory
- TETRA-band fixed from factory

Frequency Range	TETRA	2m	4m
Frequency	380-430 MHz	167,5 - 169,4 MHz 172,1 - 174,0 MHz	74,2 - 77,5 MHz 84,0 - 87,3 MHz
VSWR	≤ 1,5	≤ 1,5 ≤ 1,8	≤ 2,0 ≤ 3,5
Impedance	50 Ω	50 Ω	50 Ω
Isolation TETRA/ 2m/ 4m	> 30 dB	> 30 dB	> 30 dB
Max. Power	10 W	15 W	15 W
Connector	FME (m)	FME (m)	FME (m)



TETRA-Diplexer (tuneable) **4606.01** TETRA

- Connect 2 transceivers to one antenna
- Built-in impedance matching section for the highest isolation up to -60 dB
- Attach 2 antennas to one transceiver
- Box of finplate, soldered
- Mounting by two screws
- Operating temperature -30° ... +60° C

Frequency Range	TETRA
Frequency	380-410 MHz
VSWR	≤ 1,5
Impedance	50Ω
Nominal Diplexer Loss	3,0 dB
Total Transmission Loss	≤ 3,5 dB
Power	2x 10 W 1x 20 W
Weight	~ 110 g
Connector	FME (m)



4-Way Signal Splitter active **4617.50** Radio Signal Splitter

A signal splitter with following features:

- Splitting one AM/FM signal to four receivers
- not to be used inverse

Frequency Range	AM/FM
Frequency	0,1...108 MHz
Impedance	50Ω
VSWR	≤ 1,5 : 1
Amplification (1 Receiver)	12 dB
Amplification (4 Receiver)	0 dB
Isolation (Receiver to Receiver)	12 dB
Power supply	+ 12/24 V, 50 mA
Connector	M10x0,75 (m)

Adapters



4370.01		FME(m) FME(m)
4370.02		FME(m) BNC(m)
4370.03		FME(m) BNC(m)
4370.04		FME(m) TNC(m)
4370.28		FME(m) Mini-UHF(m)
4370.06		FME(m) Mini-UHF(m)
4370.07		FME(m) N(m)
4370.20		FME(m) SMA(m)
4370.42		FME(m) PL(m)
4370.75		IEC(f) F(m)
4370.43		BNC(f) PL(m)
4370.57		ISO DIN 41585

Adapters



4370.24		TNC(m)RG 58 for crimping
4370.09		FME(m)RG 58 for crimping
4370.51		FME(m)RG 174 for crimping
4370.25		PL(m)RG 58 solderable
4370.48		FME(m) Special Low Loss for crimping
4370.52		FME(m) Low Loss for crimping
4370.13		BNC(m)RG 58 for crimping
4370.08		FME(f)RG 58 for crimping
4370.46		FME(f) Special Low Loss for crimping
4370.14		BNC(m)RG 58 solderable
4370.15		BNC(m)RG 174 for crimping
4370.44		FME(m) Low Loss for crimping

Other accessories



4716.01-01.01 Adapter Opel/Isignia/Zafira	
4715.01-01.01 Adapter Mercedes Benz - C-Klasse	
4612.39 Thread extension M14x0.75/M18x1-1.6mm	
3724.02-02.01 Adapter Audi A6/VW- Golf VII	
3724.01-02.01 Adapter Mercedes Benz - E-Klasse	
4065.02 Mother M14/M18 with claws	
4370.11 Anti-rattle Foam part Opel/Isignia/Zafira	
4653.11 Replacement adhesive set for 4486.xx, 4488.xx, 4570.xx, 4430.xx, 4571.xx, 4934.xx	
4668.011 Replacement adhesive set for 4466.xx, 4468.xx	
4919.02-02 Stand Base - Applicable to any Table Top Antennas	
4657.11 Mounting kit Base - Applicable to any Table Top Antennas	
4298.02.01 Adapter plate 4296.01; 4298.02 - Mercedes Benz - E-Klasse	



Antennentechnik provides compatible adaptor leads and extension cables for major end devices and radio manufacturers and models.



Cable Data

Type	RG 174	RG 58	Special Low Loss	Low Loss
Impedance	50Ω	50Ω	50Ω	50Ω
Attenuation	141,8 dB/100m @ 2GHz	141,8 dB/100m @ 2GHz	141,8 dB/100m @ 2GHz	141,8 dB/100m @ 2GHz
Outer Diameter	Ø 2,65 mm	Ø 4,95 mm	Ø 3,2 mm	Ø 5,5 mm
Outer Jacket	black flexible PVC	black flexible PVC	black flexible PVC	black flexible PVC
Length	various lengths available			
Termination Data	various connections available			

As the forefront of Antenna innovation and design, Antennentechnik Bad Blankenburg GmbH, the partner of choice for many automotive customers, is perfectly placed in a central European location to supply both European and Global customers in a timely fashion, both directly and through its partners.

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