



Camping & Caravan 2022

At home when travelling



KATHREIN
Digital Systems GmbH

Who we are and **what** we stand for

We ensure the best possible radio and TV reception

KATHREIN Digital Systems is the market leader for the digital reception of satellite, terrestrial, cable or IP channels, and for signal splitting within buildings and caravans. We are constantly extending our reliable high-quality product portfolio for modern TV and radio reception with innovative solutions in the field of building technology.

Our solutions and systems are absolutely top-class, based on our great expertise in development and unexcelled quality standards in manufacturing. High-quality satellite reception systems in conjunction with well-designed solutions for signal splitting – be it within a single-family house

or a large building complex – bring the best signals in HD quality all the way to the receiving devices. New technologies such as SAT>IP, optical satellite splitters and modular head-end technology for hotel TV close the gap between the classic signal splitting techniques and modern fibre optic and network technologies.

The well-developed solutions from KATHREIN Digital Systems are also the best choice for TV reception in motor homes and caravans.

Find out more about us at www.kathrein-ds.com

Our awards:



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With Kathrein
at home when travelling



> If you travel a lot but still don't want to miss your regular TV and radio programmes. Kathrein has been responding to their customers' desires since 1974 and has developed mobile reception systems specially for use in motor homes and caravans. These are designed for maximum convenience and ease of operation, and offer the best Kathrein quality. Our range includes not only fully automatic satellite

reception systems but also inexpensive semi-automatic and manual alignment systems. SAT jointed masts, mast tripod stands and planar antennas make this type of satellite reception very simple.



WLAN routers

➤ Quality routers for Internet reception in motor homes / caravans CAR 150 WiFi Duo

Do you often make trips in your motor home or caravan and would you like quick and easy Internet access wherever you are in the world? Then your best option is to equip your motor home or caravan immediately with the Kathrein WLAN and LTE router.

Because it has two SIM card slots you can access two different LTE networks at a time, **without having to switch cards**. This doubles your chances of finding excellent signal strength at the camp site or whilst you're on the move.





The compact 5-in-1 antenna with two LTE antennas, one GPS antenna and two WLAN antennas is mounted on the outside of the vehicle to ensure good network reception. This allows you to easily use the WLAN networks on the camp sites, and also take advantage of free hot-spots at businesses and restaurants. The router has a user-friendly operating interface which shows you at a glance what signal strengths are available. And makes it very easy to switch between different networks.

Simple & intuitive operation



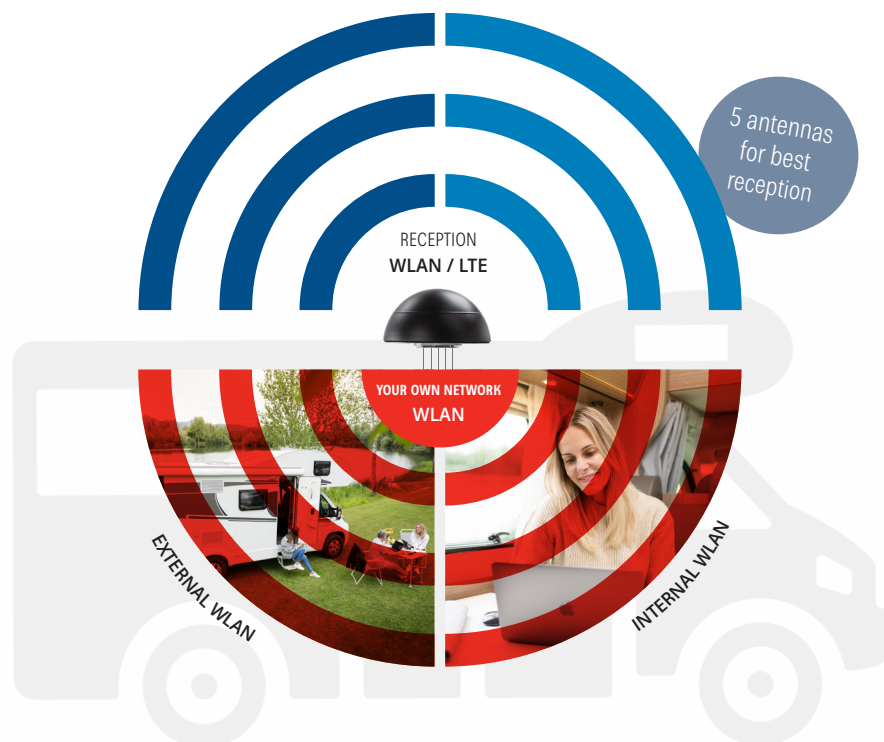
Main features

- Internet via mobile telephony (LTE) or WLAN
- Two SIM card slots for access to different networks, for instance D1 and Vodafone, or local operators when you're abroad
- 12 V or 230 V power supply

Items supplied:

- Router
- Roof antenna
- Internal WLAN antenna
- Roof duct with securing gland
- 230 V power supply unit
- Ethernet cable
- 12 V connection cable

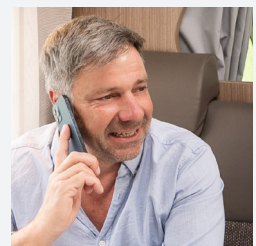
Your own hotspot within the motor home and around it



5 antennas for best reception

ADVANTAGE

There is no need to log in your mobile terminals all over again when you switch to a new LTE or WLAN network.





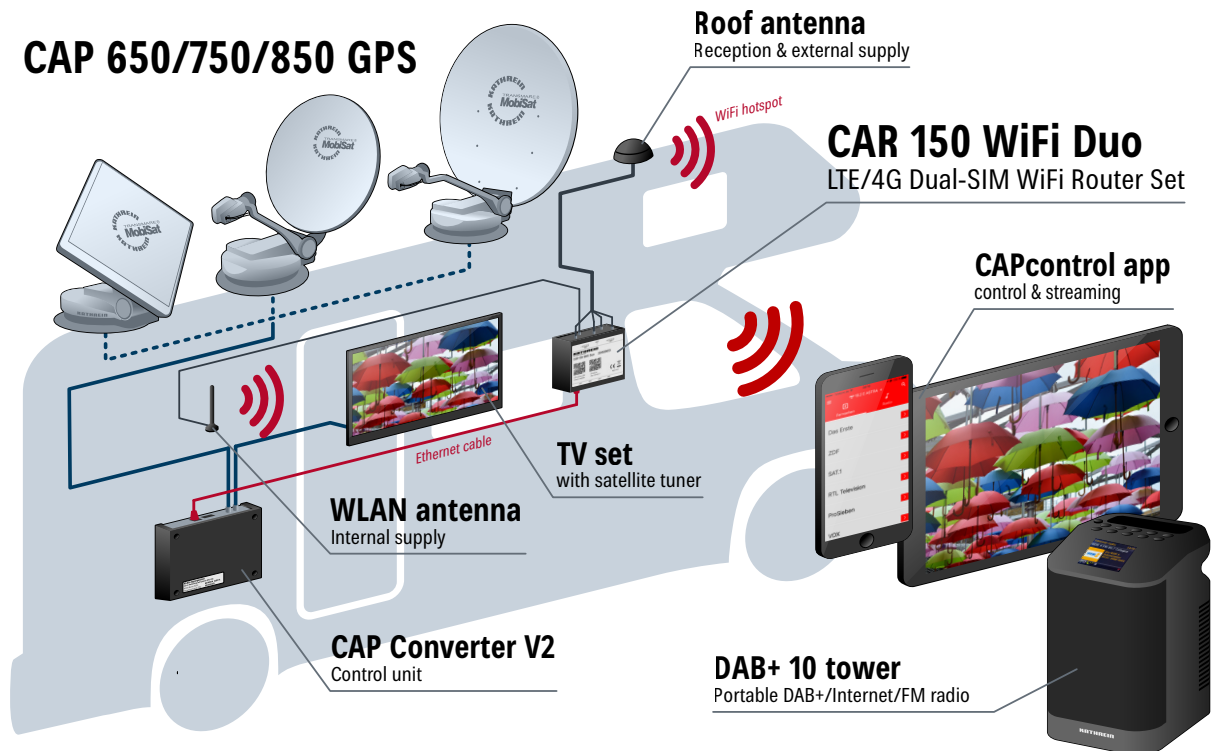
> Streaming of radio & TV channels via the router

CAR 150 WiFi Duo in conjunction with CAP 650/750/850 GPS/CAP 500M plus or HDS 166 plus

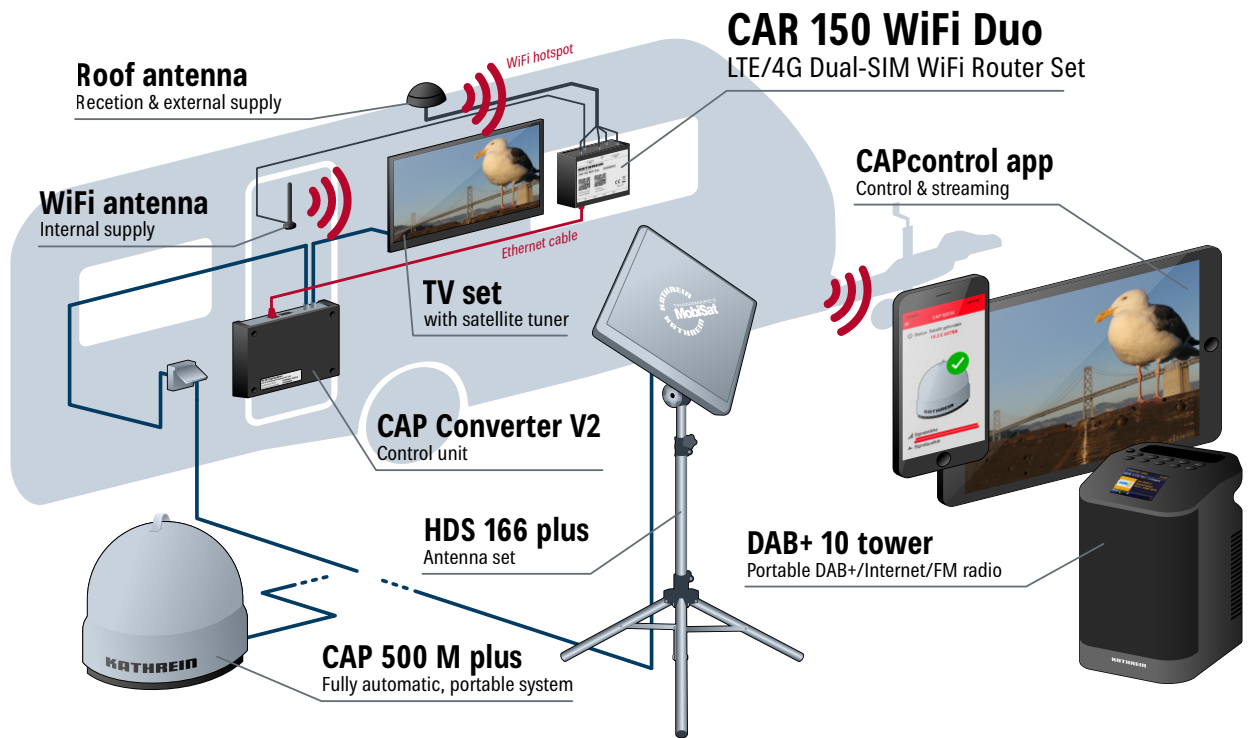
Using CAP x50 GPS, CAP 500M plus or HDS 166 plus with the CAR 150 WiFi Duo router and our free “CAP control” app, you can easily stream the received radio and TV channels on to a mobile terminal. In this scenario the UFZ 131/132 WLAN/USB normally required for streaming is replaced by the router. This has the advantage that the WLAN signal

broadcast by the router via the internal and external antennas has a higher signal strength than that broadcast by the UFZ 131/132 and thus creates a wider radius of use around the motor home or caravan.

CAR 150 WiFi Duo in conjunction with CAP 650, 750 or 850 GPS



CAR 150 WiFi Duo in conjunction with CAP 500M plus or HDS 166 plus



Overview of our advantages (HDP 650/750/850 GPS)

> Why you should choose a fully automatic antenna from Kathrein



1

GPS in all fully automatic antennas

GPS integration means we have reduced the search time for the systems to about 1 minute.



2

3 years warranty

Continuous optimisation means we are so impressed by the quality of our products that we offer a 3 year warranty on the HDP turntable.



3

Quality "made in Germany"

Kathrein turntables are developed and manufactured in Germany. We use high-quality materials to ensure a long working life.



4

Aerodynamic design

The aerodynamic design of the Kathrein HDP 750 and 850 fully automatic antennas minimises driving noise within the vehicle to an extreme degree.



5

CAP control app

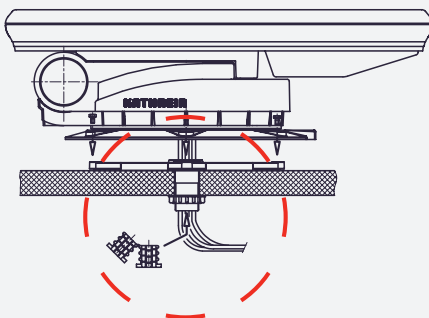
An app for controlling the automatic antennas, streaming of live TV to a mobile terminal (in conjunction with the UFZ 131/132), detecting the HDZ 60/66/66 Skew elevation instrument, integrated SAT finder and voice assistance during the alignment process (for instance of the HDS 166 plus antenna set) – all conveniently arranged on your smartphone/tablet.



6

Cable pass-through

The cables of the Kathrein fully automatic antennas are not brought out down the side of the vehicle, they are brought into the vehicle directly underneath the system.



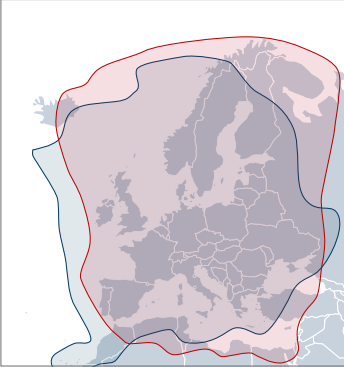

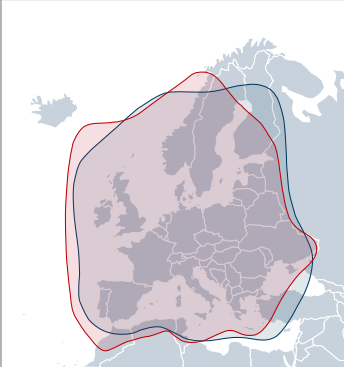





7

CI-BUS







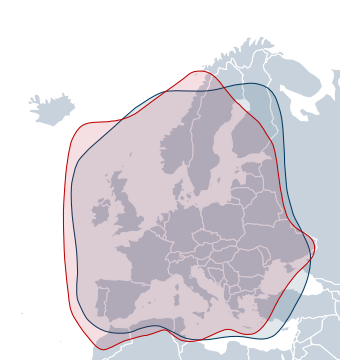

The use of an additional adapter renders the antenna CI-BUS-capable and thus gives you an easy facility for integration into CI-BUS systems.



Overview of satellite reception

	Footprints		Features	Page
■ ASTRA 19.2° East ■ Hotbird 13° East			<p>HDP 850 GPS</p> <ul style="list-style-type: none"> Optimised installed height: 17 cm Wide reception range thanks to the 85 cm parabolic reflector Twin LNB for connecting a second receiver or TV set <p>Order no.: 204500003</p>	16
			<p>HDP 750 GPS</p> <ul style="list-style-type: none"> Optimised weight: < 10 kg Optimum aerodynamics (low air resistance) Twin LNB for connecting a second receiver or TV set <p>Order no.: 20310056</p>	18
			<p>HDP 650 GPS</p> <ul style="list-style-type: none"> Compact design Installed height: 21 cm Twin LNB for connecting a second receiver or TV set <p>Order no.: 20310055</p>	20
			<p>CAP 500M CAP 500M plus</p> <ul style="list-style-type: none"> The complete package for fully automatic SAT reception (ASTRA 19.2° East) Lightweight, portable and thus mobile and flexible to use No additional controller required Streaming of TV and radio channels (plus) <p>Order no.: 203500003 203500004</p>	22

■ ASTRA 19.2° East ■ Hotbird 13° East

Footprints		Features	Page
		<p>HDS 166 HDS 166 plus</p> <ul style="list-style-type: none"> ▪ A space-saving and inexpensive alternative to the fully automatic SAT antenna ▪ Twin LNB for connecting a second receiver or TV set ▪ Voice wizard for alignment (plus) ▪ Streaming of TV and radio channels (plus) <p>Order no.: 20310052 2030000002</p>	<p>26</p>
		<p>BAS 66 Skew</p> <ul style="list-style-type: none"> ▪ For use on stationary motor homes, caravans or HGVs ▪ For mounting on HDM 14x SAT-jointed masts ▪ Twin LNB for connecting a second receiver or TV set ▪ With skew adapter plate for reception optimisation at the edge of the satellite footprint <p>Order no.: 2000000001</p>	<p>30</p>
		<p>BAS 65</p> <ul style="list-style-type: none"> ▪ For mounting on the wall, on masts, on booms and on flat surfaces ▪ Twin LNB for connecting a second receiver or TV set ▪ Incl. mounting support for easy alignment of the antenna <p>Order no.: 20010032</p>	<p>31</p>
		<p>KEA 650</p> <ul style="list-style-type: none"> ▪ Folding LNB carrier arm of aluminium ▪ Aluminium reflector, powder-coated ▪ Rear part, mast and clamping pieces (fully pre-assembled) of galvanised steel <p>Order no.: 20010048</p>	<p>31</p>



Fully automatic SAT antennas

> Your routes to perfect SAT reception



CAP 500M



HDP 850 GPS



HDP 750 GPS



HDP 650 GPS

Solution 1: Individual SAT-TV packages

Consisting of HDP (650/750/850 GPS) and CTS-TV set (22/24/27/32")



Caravan TV systems – single-cable solution from Kathrein and alphasatronics

- Control the antenna directly from the TV set
- Only one coaxial cable between the TV set and the antenna
- Minimal installation work
- Live TV on a mobile terminal (smartphone, tablet) using the UFZ 131/132 (optional accessory)
- 100 % freedom from pixel errors on the LED panel
- Made in Germany

Solution 2: Complete CAP package

Recommended where a TV set with a SAT tuner is already available.

Contents: Fully automatic antenna, CAP converter



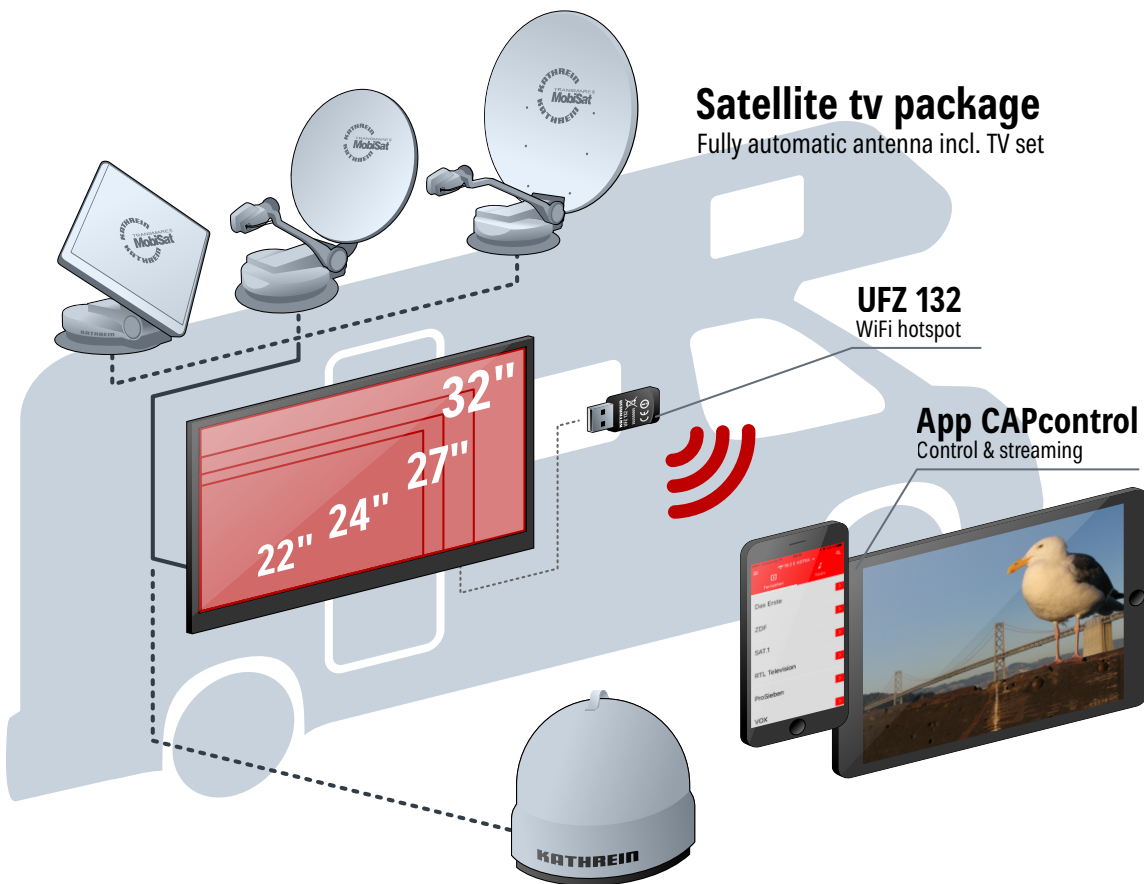
CAP 650 GPS/750 GPS/850 GPS/500M plus

- Receiver-independent antenna
- Compatible with any receiver or TV set with a SAT tuner
- Live TV on a mobile terminal (smartphone, tablet) using the UFZ 131/132 (optional accessory)

> "One-cable solution" from Kathrein and alphatronics
Individual SAT-TV packages

For your individual SAT-TV package, choose one of our fully automatic SAT antennas together with any TV set from alphatronics. These combine the expertise of both companies into an intelligent reception concept.

The entire operation of the fully automatic SAT antenna is performed directly from an alphatronics TV set - there is no need for additional integration of a separate control unit or receiver. Thus only two components (the turntable and the TV set) are required for TV and radio reception in your caravan or mobile home. In their cooperative endeavour, Kathrein and alphatronics each value above all the simplicity of the connection between the antenna and the TV set, with very little need for cabling. Control of the turntable and transfer of the satellite signal to the TV set are both performed over one and the same coaxial cable.

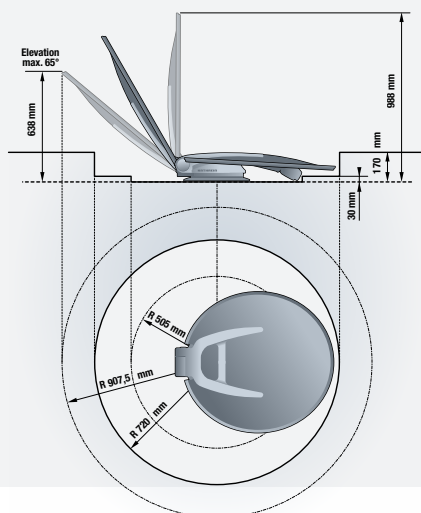


> The big
HDP 850 GPS

The HDP 850 GPS is based on the HDP 750 GPS but has been given a new carrier arm and a large 85 cm parabolic reflector. The larger parabolic reflector increases the safety margin for reception and increases the effective operating radius of the system. The HDP 850 also uses GPS to ensure quick alignment of the antenna in about 1 minute. Due to the modified mechanism, the aerodynamic design of the system and the antenna is only about 18 cm high, permitting vehicle speeds of up to 130 km/h (with the antenna lowered). In conjunction with the proven CAP control app and the UFZ 131 or 132 WLAN/USB adapter, the HDP 850 also allows streaming of any live TV on to a mobile terminal (smartphone, tablet).

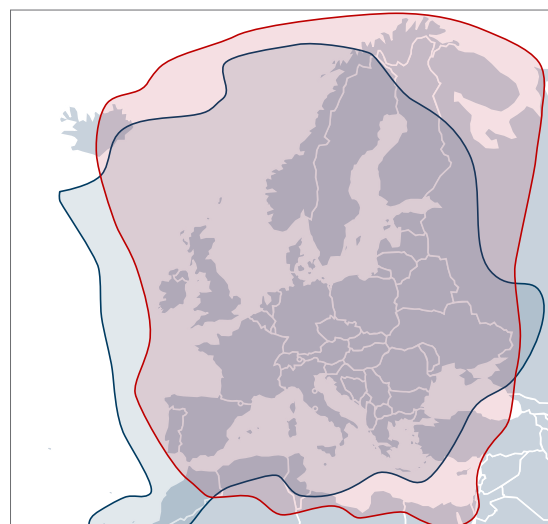
Main features

- Optimised installed height: 17 cm
- Streaming of live TV using the UFZ 131/132 WLAN/USB adapter and the free CAP control app
- Large reception range due to the 85 cm parabolic reflector with high gain
- Twin LNB for connecting a second receiver or TV set
- Automatic alignment to other satellites on changing channels



* KATHREIN Digital Systems GmbH recommended retail price

Footprints



■ ASTRA 19.2° East ■ Hotbird 13° East

SAT-TV package with HDP 850 GPS

Solution 1

**Fully automatic antenna
HDP 850 GPS
incl. alphatronics TV set**



- Control the antenna directly from the TV set
- Only one coaxial cable between the TV set and the antenna
- Only by remote control
- No additional control unit required
- Live TV on a mobile terminal (smartphone, tablet) using the UFZ 131/132 (optional accessory)

HDP 850 GPS, order no.: 204500003

UVP HDP separately: €1,949.-

BN TV	Type	RRP CTS TV	Total RRP for HDP + CTS-TV
204500007	CTS SL-22 DSBAI+K	€699.-	€2,648.-
204500008	CTS SL-24 DSBAI+K	€769.-	€2,718.-
204500009	CTS SL-27 DSBAI+K	€849.-	€2,798.-
204500010*	CTS SL-32 DSBAI+K	€899.-	€2,848.-

* UFZ 132 inclusive

Solution 2

**Fully automatic antenna
HDP 850 GPS incl. CAP converter**



- Receiver-independent antenna
- Compatible with any receiver or TV set with a SAT tuner
- Live TV on a mobile terminal (smartphone, tablet) using the UFZ 131/132 (optional accessory)

Designation	Contents	Order no.	RRP (€)
CAP 850 GPS	HDP 850 GPS and CAP converter	203500001	1,999.-

Recommended accessories

▪ **HDS 50 (only for solution 2)**

External control unit for the CAP x50 GPS series

Order no. 20410070, RRP €199.-

Further details on page 37

▪ **UFZ 132**

WLAN/USB adapter

Order no. 204500005, RRP €39.90

Further details on page 32

▪ **HDZ 100**

Roof pass-through

Order no. 20410032, RRP €29.90

Further details on page 37

▪ **HDS 42**

Master/slave switch

Order no. 2040000006, RRP €59.-

Further details on page 40

* KATHREIN Digital Systems GmbH recommended retail price



> The lightweight HDP 750 GPS

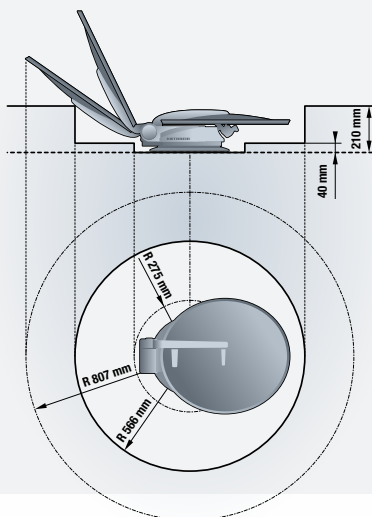
The use of a parabolic antenna increases the reception range compared to a planar antenna. The design of the parabolic antenna makes a clear contribution to limiting the weight of the antenna, keeping it below 10 kg, one of the lightest antennas on the market. This antenna also includes a twin LNB for connection of a second receiver. The HDP 750 GPS also uses GPS to ensure quick alignment of the antenna in about 1 minute. The aerodynamic design of the turntable and the planar antenna is only 21 cm high, permitting vehicle speeds of up to 130 km/h (with the antenna lowered).

Main features

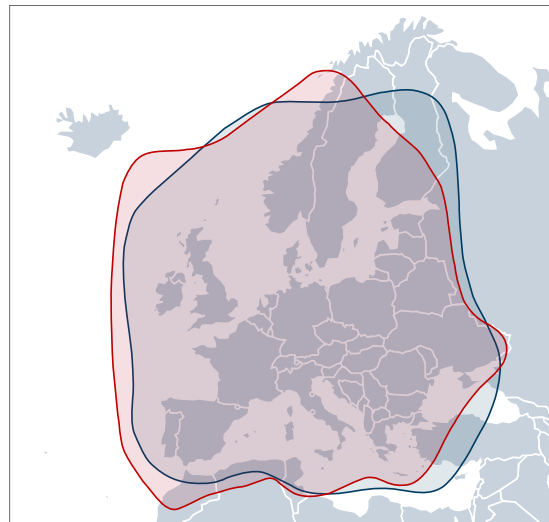
- Optimised weight: < 10 kg
- One of the lightest fully automatic turntables
- Optimum aerodynamics
 - Low air resistance
 - Low noise emission
- Allows connection of a second receiver or TV set



Space required



Footprints



■ ASTRA 19.2° East ■ Hotbird 13° East

SAT-TV package with HDP 750 GPS

Solution 1

**Fully automatic antenna
HDP 750 GPS
incl. alphatronics TV set**



- Control the antenna directly from the TV set
- Only one coaxial cable between the TV set and the antenna
- Only by remote control
- No additional control unit required
- Live TV on a mobile terminal (smartphone, tablet) using the UFZ 131/132 (optional accessory)

HDP 750 GPS, order no.: 20410084

UVP HDP separately: €1,699.-

BN TV	Type	RRP CTS TV	Total RRP for HDP + CTS-TV
204500007	CTS SL-22 DSBAI+K	€699.-	€2,398.-
204500008	CTS SL-24 DSBAI+K	€769.-	€2,468.-
204500009	CTS SL-27 DSBAI+K	€849.-	€2,548.-
204500010*	CTS SL-32 DSBAI+K	€899.-	€2,598.-

* UFZ 132 inclusive

Solution 2

**Fully automatic antenna
HDP 750 GPS incl. CAP converter**



- Receiver-independent antenna
- Compatible with any receiver or TV set with a SAT tuner
- Live TV on a mobile terminal (smartphone, tablet) using the UFZ 131/132 (optional accessory)

Designation	Contents	Order no.	RRP (€)
CAP 750 GPS	HDP 750 GPS and CAP converter	20310056	1,799.-

Recommended accessories

▪ **HDS 50 (only for solution 2)**

External control unit for the CAP x50 GPS series

Order no. 20410070, RRP €199.-

Further details on page 37

▪ **UFZ 132**

WLAN/USB adapter

Order no. 204500005, RRP €39.90

Further details on page 32

▪ **HDZ 100**

Roof pass-through

Order no. 20410032, RRP €29.90

Further details on page 37

▪ **HDS 42**

Master/slave switch

Order no. 2040000006, RRP €59.-

Further details on page 40

* KATHREIN Digital Systems GmbH recommended retail price

> The compact
HDP 650 GPS

The HDP 650 GPS fully automatic antenna is equipped with a planar antenna, which makes this solution particularly compact and greatly minimises the space required. It is equipped with a twin LNB and also with GPS for very quick alignment of the antenna in about 1 minute.

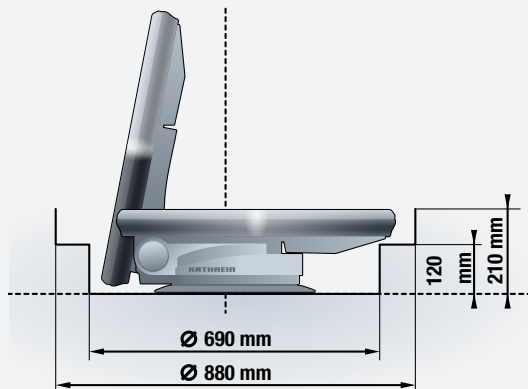
The aerodynamic design of the turntable and the planar antenna is only 21 cm high, permitting vehicle speeds of up to 130 km/h (with the antenna lowered).

Main features

- Compact design
- Simple installation – only a single cable for control and transmission of the SAT signals
- Allows connection of a second receiver or TV set



Space required



Footprints



■ ASTRA 19.2° East ■ Hotbird 13° East

SAT-TV package with HDP 650 GPS

Solution 1

**Fully automatic antenna
HDP 650 GPS
incl. alphantronics TV set**



- Control the antenna directly from the TV set
- Only one coaxial cable between the TV set and the antenna
- Only by remote control
- No additional control unit required
- Live TV on a mobile terminal (smartphone, tablet) using the UFZ 131/132 (optional accessory)

HDP 650 GPS, order no.: 20410083

UVP HDP separately: €1,799.-

BN TV	Type	RRP CTS TV	Total RRP for HDP + CTS-TV
204500007	CTS SL-22 DSBAI+K	€699.-	€2,498.-
204500008	CTS SL-24 DSBAI+K	€769.-	€2,568.-
204500009	CTS SL-27 DSBAI+K	€849.-	€2,648.-
204500010*	CTS SL-32 DSBAI+K	€899.-	€2,698.-

* UFZ 132 inclusive

Solution 2

**Fully automatic antenna
HDP 650 GPS
incl. CAP converter**



- Receiver-independent antenna
- Compatible with any receiver or TV set with a SAT tuner
- Live TV on a mobile terminal (smartphone, tablet) using the UFZ 131/132 (optional accessory)

Designation	Contents	Order no.	RRP (€)
CAP 650 GPS	HDP 650 GPS and CAP converter	20310055	1,899.-

Recommended accessories

▪ **HDS 50 (only for solution 2)**

External control unit for the CAP x50 GPS series

Order no. 20410070, RRP €199.-

Further details on page 37

▪ **UFZ 132**

WLAN/USB adapter

Order no. 204500005, RRP €39.90

Further details on page 32

▪ **HDZ 100**

Roof pass-through

Order no. 20410032, RRP €29.90

Further details on page 37

▪ **HDS 42**

Master/slave switch

Order no. 2040000006, RRP €59.-

Further details on page 40



> The portable CAP 500M

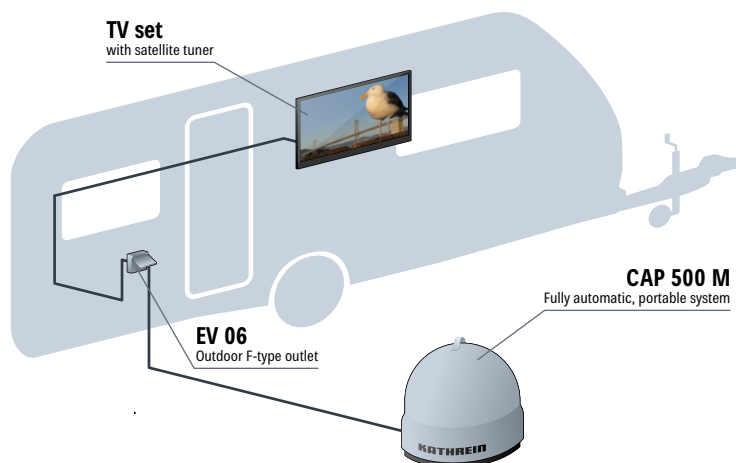
- The complete package for fully automatic SAT reception from ASTRA 19.2° East
- Lightweight, portable and thus mobile and flexible to use
- Quick installation and TV reception in typically 90 seconds
- No additional controller required
- Software updating via Bluetooth
- Power supply directly from any TV and any receiver with an integral SAT tuner
- Consumes no power in stand-by
- Anti-theft security

Items supplied:

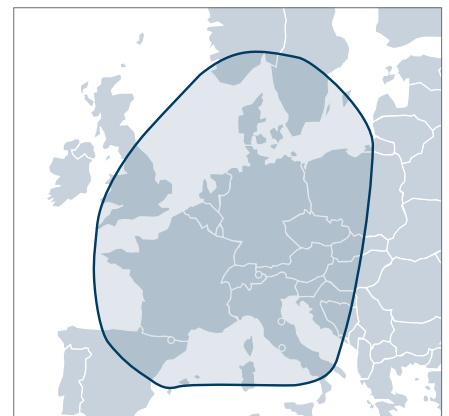
- Fully automatic SAT antenna
- 10-m coaxial cable
- User manual/operating instructions



CAP 500M in direct operation on the TV set



Footprint ASTRA 19.2° East



BN	Type	RRP	BN TV	Type	RRP CTS TV	Total RRP for antenna + CTS-TV
203500003	CAP 500 M	€949.-	204500007	CTS SL-22 DSBAI+K	€699.-	€1,648.-
			204500008	CTS SL-24 DSBAI+K	€769.-	€1,718.-
			204500009	CTS SL-27 DSBAI+K	€849.-	€1,798.-
			204500010*	CTS SL-32 DSBAI+K	€899.-	€1,848.-

* UFZ 132 inclusive

> The portable + streaming CAP 500M plus

- Live streaming of TV and radio channels on a mobile terminal in conjunction with the free CAP control app
- The complete package for fully automatic SAT reception from ASTRA 19.2° East
- Lightweight, portable and thus mobile and flexible to use
- Quick installation and TV reception in typically 90 seconds
- Software updating via Bluetooth
- Power supply directly via the CAP converter
- Anti-theft security

Items supplied:

- Fully automatic SAT antenna
- 10-m coaxial cable
- User manual/operating instructions
- Kathrein WLAN/USB adapter
- CAP converter V2

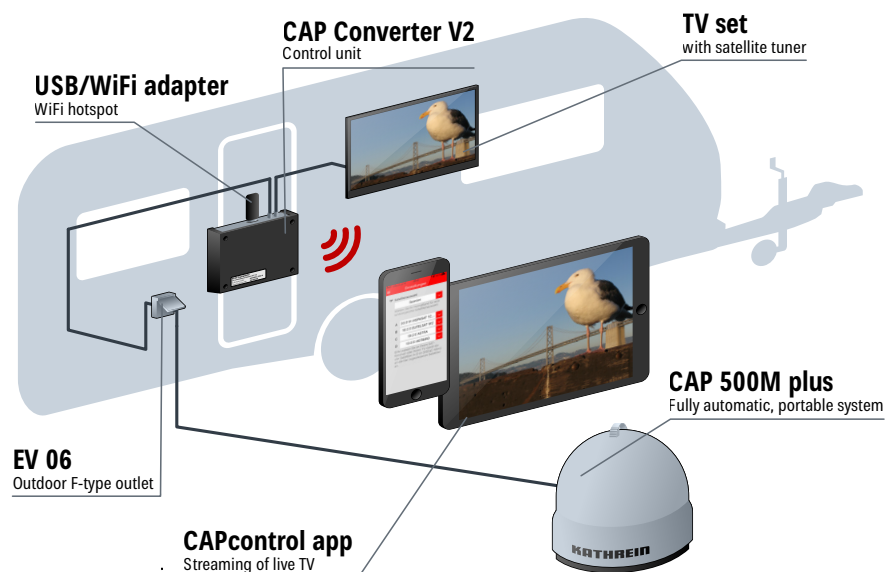


WLAN/USB adapter



CAP converter V2

CAP 500M plus with streaming of live TV



Install the CAP control app here:



> **alphatronics Smart TV sets**
CTS SL-xx



You will be enthusiastic about the technological advantages offered by the SL-Line+. It has two SMART-TV portals, thus it opens up the world of the mobile Internet for you! The Android 9.0 operating system allows you to surf the Internet in comfort, or to choose from a wide variety of apps in the Google Play Store. The Netrange SMART-TV portal offers you customised SMART-TV content and a wide variety of interesting apps. Of course streaming services such as Netflix, Amazon Prime and Disney+ are available. A further new feature is the capability to perform an OTA update (software update via the Internet). The Miracast and DLNA function allows the screen content of a mobile terminal to be shown full size on the TV.

The SL-Line+, like all alphatronics TV sets, also equipped with Bluetooth. The new Bluetooth 5.0 standard allows connections to be established even more quickly, with a greater range and lower power consumption. The colour resolution incorporates an even wider colour spectrum and even brighter colours. The new AUDIO DSP technology offers a better sound quality experience, and the new digital processor offers quicker access to your favourite channels.



- Kathrein One-Cable-Solution control unit
- Audio-DSP technology
- 2 × HDMI
- alphatronicsSound Bluetooth 5.0 module integrated
- CI+ slot
- EPG
- Photo viewer
- 2 × USB 2.0 port/media player
- DVD player integrated on the side (format CD, DVD, VCD, MP3, DVD-R, DVD-RW, DivX, JPEG)
- Internet SMART-TV 9.0
- SMART TV portal
- Sleep Timer
- On/Off switch
- VESA standard (100 × 100 mm)

Items supplied:

- Remote control
- DVB-T antenna AN5
- Power supply unit
- YPbPr adapter
- AV adapter
- 12-V cable for the vehicle
- Batteries
- Operating instructions

Overview of caravan TV systems

“One-Cable-Solution” caravan TV systems from Kathrein & alphasatronics

BN	Type	RRP	BN TV	Type	RRP CTS TV	Total RRP for antenna + CTS-TV
203500003	CAP 500 M	€949.-	204500007	CTS SL-22 DSBAl+K	€699.-	€1,648.-
			204500008	CTS SL-24 DSBAl+K	€769.-	€1,718.-
			204500009	CTS SL-27 DSBAl+K	€849.-	€1,798.-
			204500010*	CTS SL-32 DSBAl+K	€899.-	€1,848.-
20410083	HDP 650 GPS	€1,799.-	204500007	CTS SL-22 DSBAl+K	€699.-	€2,498.-
			204500008	CTS SL-24 DSBAl+K	€769.-	€2,568.-
			204500009	CTS SL-27 DSBAl+K	€849.-	€2,648.-
			204500010*	CTS SL-32 DSBAl+K	€899.-	€2,698.-
20410084	HDP 750 GPS	€1,699.-	204500007	CTS SL-22 DSBAl+K	€699.-	€2,398.-
			204500008	CTS SL-24 DSBAl+K	€769.-	€2,468.-
			204500009	CTS SL-27 DSBAl+K	€849.-	€2,548.-
			204500010*	CTS SL-32 DSBAl+K	€899.-	€2,598.-
204500003	HDP 850 GPS	€1,949.-	204500007	CTS SL-22 DSBAl+K	€699.-	€2,648.-
			204500008	CTS SL-24 DSBAl+K	€769.-	€2,718.-
			204500009	CTS SL-27 DSBAl+K	€849.-	€2,798.-
			204500010*	CTS SL-32 DSBAl+K	€899.-	€2,848.-

* UFZ 132 inclusive



alphasatronics offer the following range of TV sets:

- 22" CTS SL-22 DSBAl+K
- 24" CTS SL-24 DSBAl+K
- 27" CTS SL-27 DSBAl+K
- 32" CTS SL-32 DSBAl+K



Dimensions of TV sets

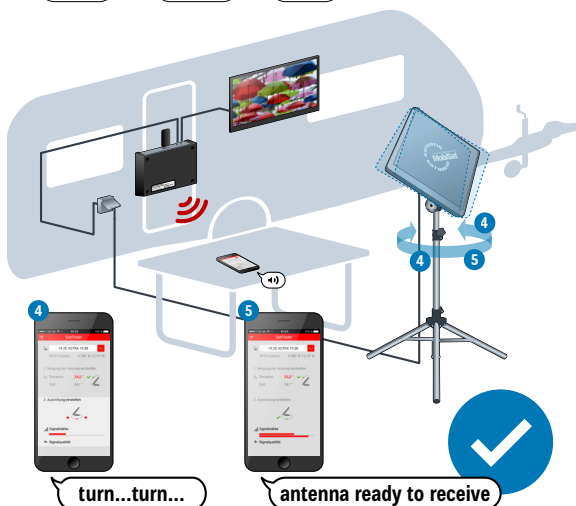
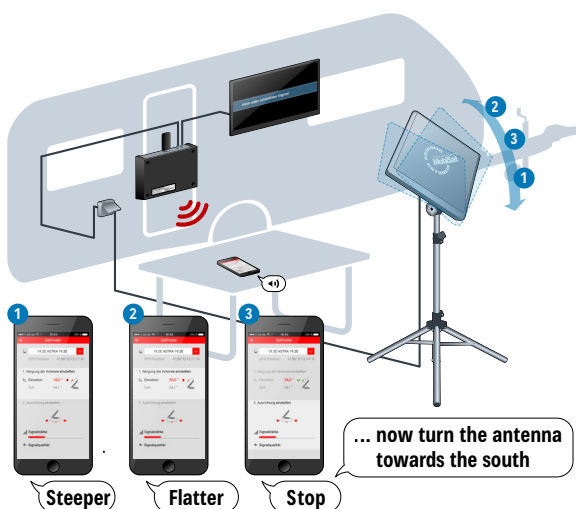
(W × H × D in mm; without a stand):

- 22": 503 × 312 × 52
- 24": 552 × 340 × 52
- 27": 622 × 376 × 55
- 32": 732 × 437 × 61

"Semi-automatic" SAT antennas

> HDS 166 plus antenna set 2030000002

This antenna set has been developed as a space-saving and inexpensive alternative to the fully automatic SAT antenna. It's perfect if you have no SAT reception directly at the vehicle, for instance because of shading by trees, and you wish to set up the system at some distance from your vehicle. The interaction between the supplied components is best established using the revised CAP control app (Android and iOS). As soon as all the components have been installed and connected, the antenna is aligned in **60 seconds**. The HDS 166 plus antenna set is your ideal companion – whether you are travelling in a motor home, a caravan or a van.



METHOD OF OPERATION

- Voice wizard for alignment
- Streaming of TV and radio channels on a mobile terminal
- 11 satellites pre-installed
- GPS-capable smartphone/tablet is required for installation

Manual alignment has never been so easy

Items supplied

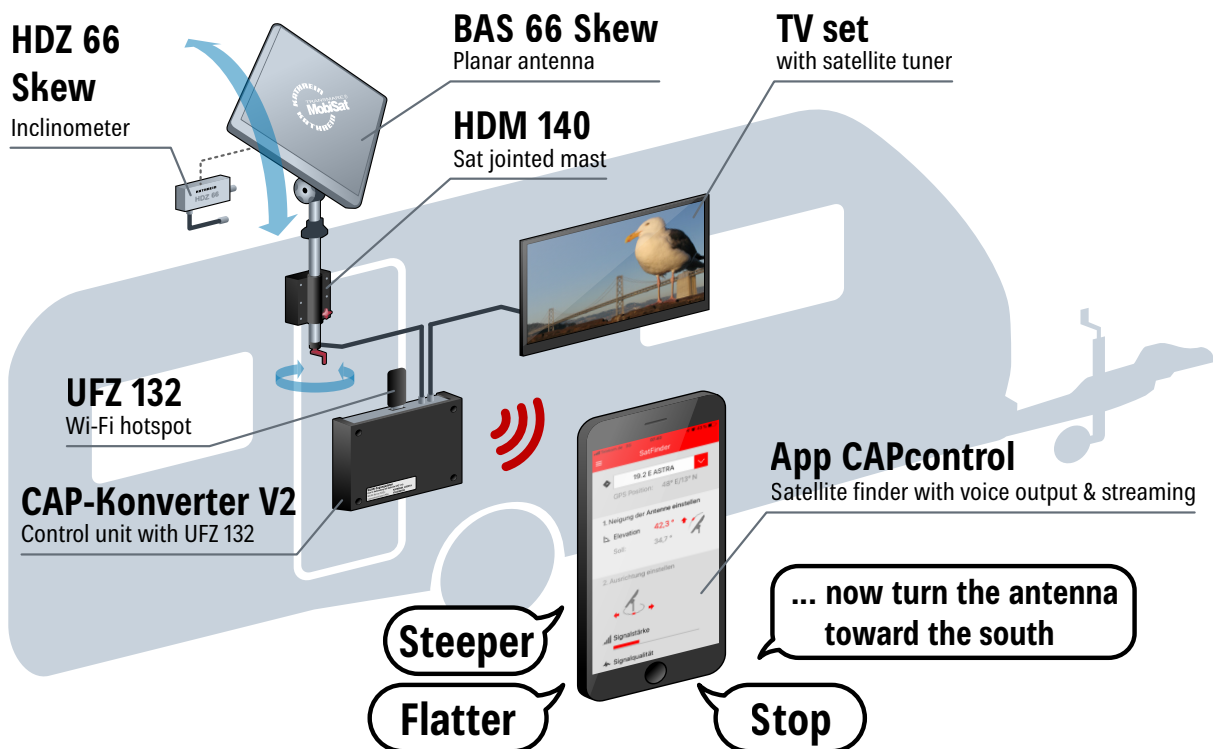
- BAS 66 Skew planar antenna (with twin LNB)
- HDZ 66 Skew elevation indicator
- Tripod, adapter joint incl. carrying bag for tripod and antenna
- CAP converter V2
- UFZ 132 WLAN/USB adapter
- 15-m coaxial cable

Recommended accessories

- EV 06 outdoor connection plug | 218464
 - 12 V power supply unit | 1683660
 - Adapter cable | 197500004
- For connection to a 230-V socket (adapter cable essential). Both obtainable from our central service and repair workshop CSS Caravan-SAT-Service GmbH

Complete solution with HDM 140/HDM 141 SAT jointed tripod mast

SAT jointed tripod masts allow optimum erection and rapid alignment of the BAS 66 planar antenna from inside the vehicle.



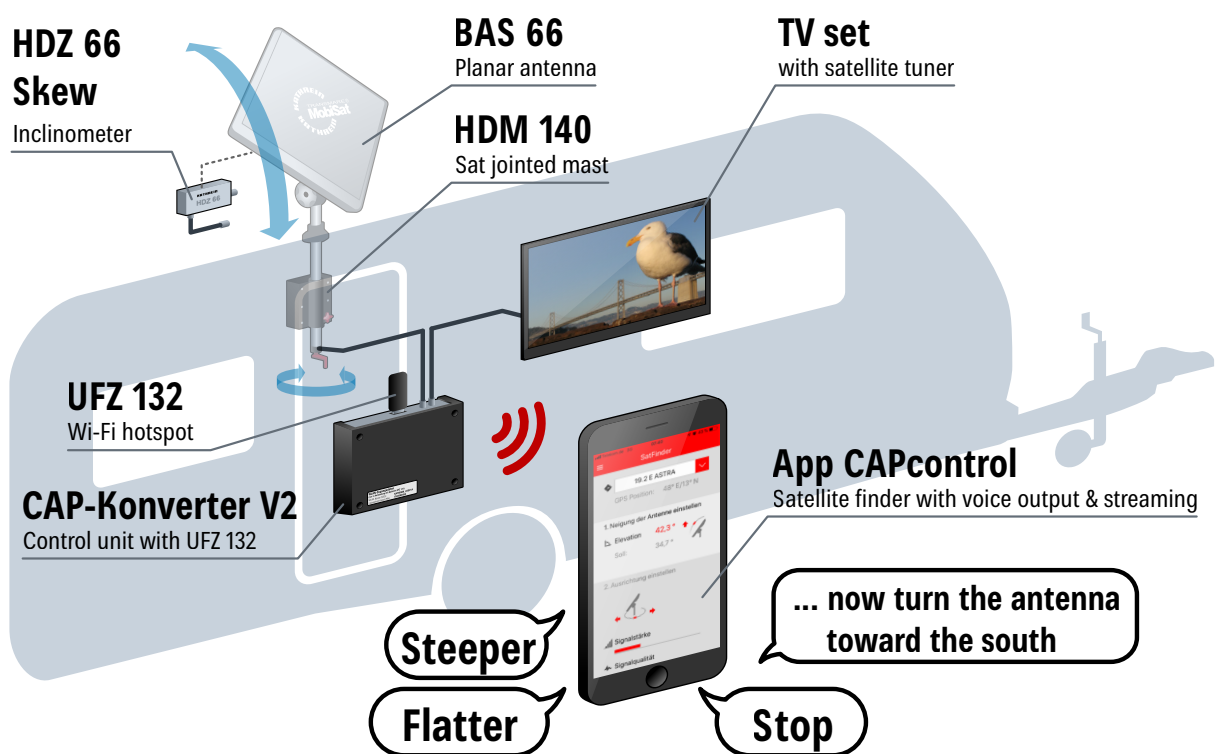
The complete HDM set consists of:

Order no.	Product	Description	RRP in €* €
200000001	BAS 66 Skew	Planar antenna with twin LNB and skew adaptor plate; Reception range: 10.7–12.75 GHz, fits a HDM SAT jointed tripod mast	229.90
218456 or 218457	HDM 140 or HDM 141	HDM 140: SAT twin jointed tripod mast for BAS 66/BAS 66 Skew for caravan installation, 103 cm long HDM 141: SAT twin jointed tripod mast for BAS 66/BAS 66 Skew for caravan installation, short version, 76.5 cm long	229.–
204500002	HDZ 66 Skew	Elevation indicator: Necessary for easy alignment using the app	99.–
204500001	CAP converter V2	Control unit: Necessary for easy alignment using the app	249.–
204500005	UFZ 132	WLAN/USB adapter: for wireless connection of suitable network-capable Kathrein receivers, IEEE 802.11n, WLAN hotspot	39.90

* KATHREIN Digital Systems GmbH recommended retail price

> Extension set for existing SAT jointed tripod mast systems

The extension set can extend a planar antenna set (such as BAS 66 with a HDM 140 jointed tripod mast) already installed in the caravan so that the system can be aligned using the app.



The extension set comprises:

Order no.	Product	Description	RRP in €*
204500002	HDZ 66 Skew	Elevation indicator: Installation set for BAS 66/BAS 66 Skew	99.–
204500001	CAP converter V2	Control unit: Necessary for easy alignment using the app	249.–
204500005	UFZ 132	WLAN/USB adapter: for wireless connection of suitable network-capable Kathrein receivers, IEEE 802.11n, WLAN hotspot	39.90

* KATHREIN Digital Systems GmbH recommended retail price

Manual SAT antennas

> HDS 166 antenna set 20310052

The HDS166 antenna set, consisting of a planar antenna, SAT tripod, adapter joint, 15-m coaxial cable and carrying bag for manual SAT reception is an excellent alternative to a fully automatic permanently installed antenna.

The BAS 66 Skew planar antenna is very well suited to searching for satellites and setting them up using a smartphone and a compass app (depending on the smartphone and operating system such an app may be pre-installed).

Align the antenna in three easy steps:

- 1 Read the settings shown in the manual for the Azimuth/Elevation table supplied
- 2 Start the compass app, place the smartphone on the planar antenna and set the inclination (elevation) of the antenna
- 3 Use the spirit level app to determine the satellite position (for instance in the Munich area the Astra 19.2° East = 169.80°), and turn the antenna in that direction



* KATHREIN Digital Systems GmbH recommended retail price

Adjust elevation

With the smartphone on and spirit level app

Setting values for location

From azimuth/elevation table in the manual



Adjust azimuth

Via integrated compass app in smartphone

> **Planar antennas** **NEU**

BAS 66 Skew

Despite their small size the BAS 66 Skew planar antennas offer optimum satellite reception. This is due to the special honeycombed dipole structure of the reception surface.

- For use on stationary motor homes, caravans or HGVs
- For mounting on HDM 14x SAT jointed masts (see page 29 for details)
- With integral twin LNB (two outputs)
- With skew adapter plate for reception optimisation at the edge of the satellite footprint

Recommended accessories

- **HDM SAT jointed masts (HDM 140/141/143)**
(see page 29 for further details)
- **HDZ 66 Skew elevation indicator**
UVP: EUR 99.-*



> **Elevation indicator**

HDZ 66 Skew

Installation kit for BAS 66 Twin - easy antenna alignment in conjunction with the UFS 940, UFS 946 or CAP converter.

- Installation set for the BAS 66 and BAS 66 Skew planar antennas
- Easy alignment of the antenna in conjunction with the UFS 940/UFS 946/CAP converter
- Installation with a few simple steps on the LNB housing of the BAS 66 and BAS 66 Skew
- The specified elevation and actual elevation are displayed in the receiver menu of the HDS 50/CAP control app
- The elevation can be displayed even when the skew is set
- Display of the set skew in the HDS 50/CAP control app control unit
- No additional cabling necessary between antenna and receiver



* KATHREIN Digital Systems GmbH recommended retail price

> Planar antenna for stationary use

BAS 65

- For mounting on the wall, on masts, on booms and on flat surfaces
- Incl. mounting support for easy alignment of the antenna
- For reception of digital SAT TV and radio channels
- Frequency range: 10.70-12.75 GHz
- Power supply is achieved by the coaxial cable
- With integral twin LNB (two outputs)



Installation examples



> Offset parabolic antennas

KEA 650

- Folding LNB carrier arm of aluminium
- Aluminium reflector, powder-coated
- Rear part, mast and clamping pieces (fully pre-assembled) of galvanised steel
- Stainless steel nuts and bolts
- Reflector colours: White, graphite



> Universal LNBs

KEL 411, KEL 422

The Kathrein EuroLine Universal feed systems are suitable for satellite receivers with a 40-mm LNB holder. They are intended for reception from satellites in the Ku band, such as ASTRA, EUTELSAT, Türksat, Hispasat etc. All LNBs are HDTV/DVB-S2 compatible.



KEL 411
(single LNB)



KEL 422
(twin LNB)

* KATHREIN Digital Systems GmbH recommended retail price

Our unique selling points

> **Smartphone/tablet controlling the antenna and receiving live streaming**

The facility to tune in to a WLAN hotspot allows TV and radio transmissions to be streamed to mobile terminals (smartphones, tablets etc.) even without an additional Internet router.

No additional charges are payable. The data are sent by the UFZ 132 directly to your mobile terminal. This does not count as part of your data volume allowance.

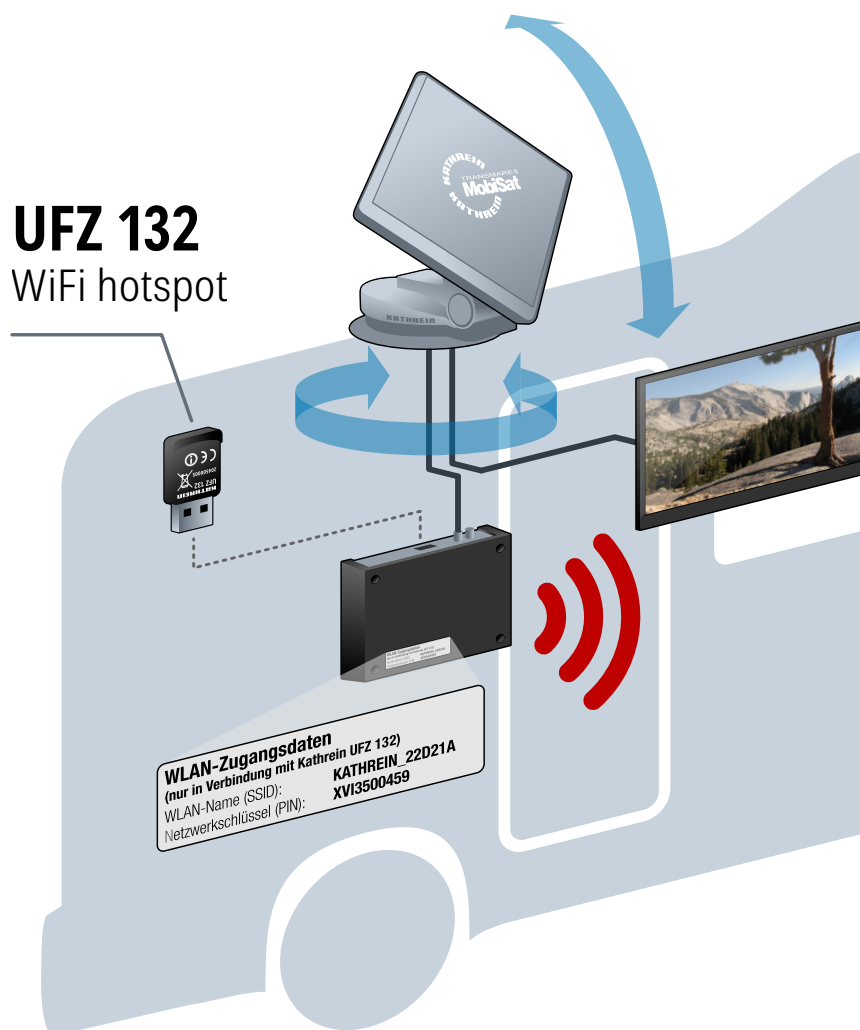
> **WLAN/USB adapter**

UFZ 132

- Supports the Wireless Standards IEEE 802.11a/b/g/n with a data rate up to 433 Mbps
- No additional software required
- Supports 2, 4 and 5 GHz ISM bands (dual band)
- Supports 64/128-bit WEP, WPA, WPA2 encryption
- Power supply via the USB port
- Suitable for CAP converters and alphantrons TV



UFZ 132 WiFi hotspot



App CAPcontrol

Control and streaming



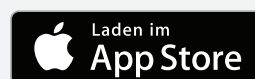
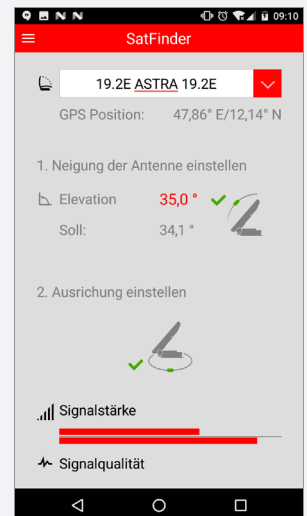
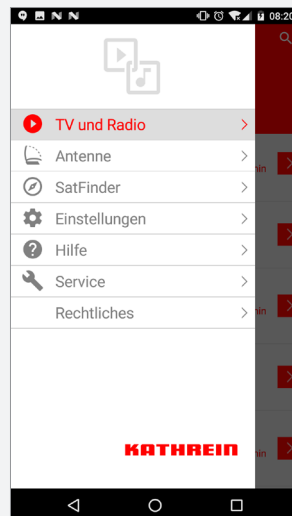
CAP control app

Convenience and versatility as standard

The Kathrein "CAP control" app has been comprehensively revised and offers some new functions. As well as the existing capability to control fully automatic antennas and live TV (in conjunction with the optional UFZ 132), the app has an integral SAT finder, designed specially for the BAS 66 Skew manual planar antenna and the HDZ 66 Skew elevation indicator. When used in conjunction with the CAP converter V2 or an alphantronics TV set with a Kathrein control unit, this antenna can now be aligned conveniently from a smartphone/tablet.

Features of the CAP control app

- Controlling the automatic antennas
- Live TV on a mobile terminal (smartphone/tablet)
- Displaying the software version and update availability for the fully automatic antennas
- Suitable for HDZ 60/66 elevation indicator
- SAT-finder integrated
- Voice assistance during the alignment of the HDS 166 plus antenna set



> **Satellite reception in vans**

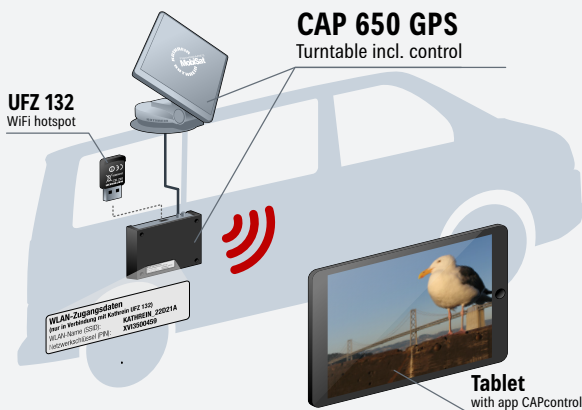
Vans – small, compact and lively – are nowadays greatly loved by caravanning enthusiasts. Compact solutions are necessary so that in such a vehicle you need not do without satellite reception. Our CAP 650 GPS fully automatic antenna and our HDS 166 or HDS 166 plus antenna sets satisfy precisely this requirement.

> **Variant 1**

TV reception with CAP 650 GPS

The compact CAP 650 GPS takes up only a small amount of space in the vehicle and in addition can also be operated without a TV set.

In this case the system is controlled from a mobile terminal (tablet, smartphone). Thanks to live streaming, TV channels can be received and displayed directly on it.



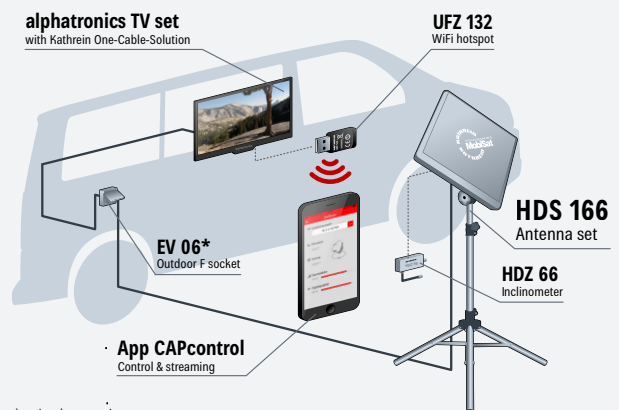
> **Variant 2**

TV reception with HDS 166 or HDS 166 plus

For campers who would prefer not to mount an antenna on their vehicle, the HDS 166 antenna set is the ideal solution. It is characterised above all by a very small packed volume and quick alignment using a smartphone.

Optimum enhancement: alphatronics SL-Line TV set (with Kathrein control unit)

The alignment is performed even more quickly using a smartphone in conjunction with an appropriate alphatronics TV set and the UFZ 131/132. The revised version of the CAP control app now detects the elevation indicator (which is included with the HDS 166). The additional integrated SAT finder allows the antenna to be optimally aligned even when the TV set cannot be seen.



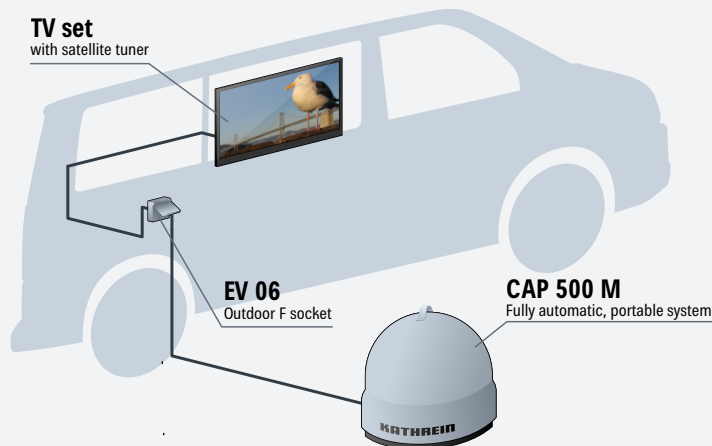
* optional accessories

> **Variant 3**

TV reception with the CAP 500M or CAP 500M plus

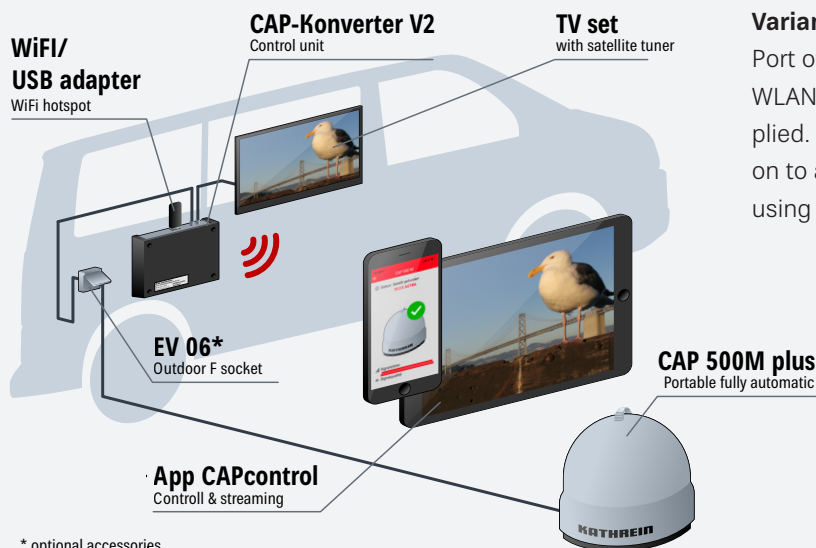
For campers who would prefer not to mount an antenna on their vehicle, but who nevertheless would like an automatic antenna, the CAP 500M or the CAP 500M plus set is the ideal solution. The CAP 500M does not have its own power supply, instead it simply draws power from the TV set with the SAT tuner, via the supplied antenna cable that is plugged in.

The plus variant (incl. CAP converter and WLAN/USB adapter) is ideal if there no TV set can be installed in the camper/mobile home, and the user wishes to stream to a mobile terminal.



Variant without streaming

The antenna cable supplied connects the CAP 500M directly to the TV set. No additional cables required.



Variant with streaming

Port of the CAP 500M and the UFZ 132 USB/WLAN adapter on the CAP converter V2 supplied. The streaming of radio and TV channels on to a mobile terminal can now be performed, using the free CAP control app.

* optional accessories

➤ **Central control of the fully automatic antenna via the CI-BUS**

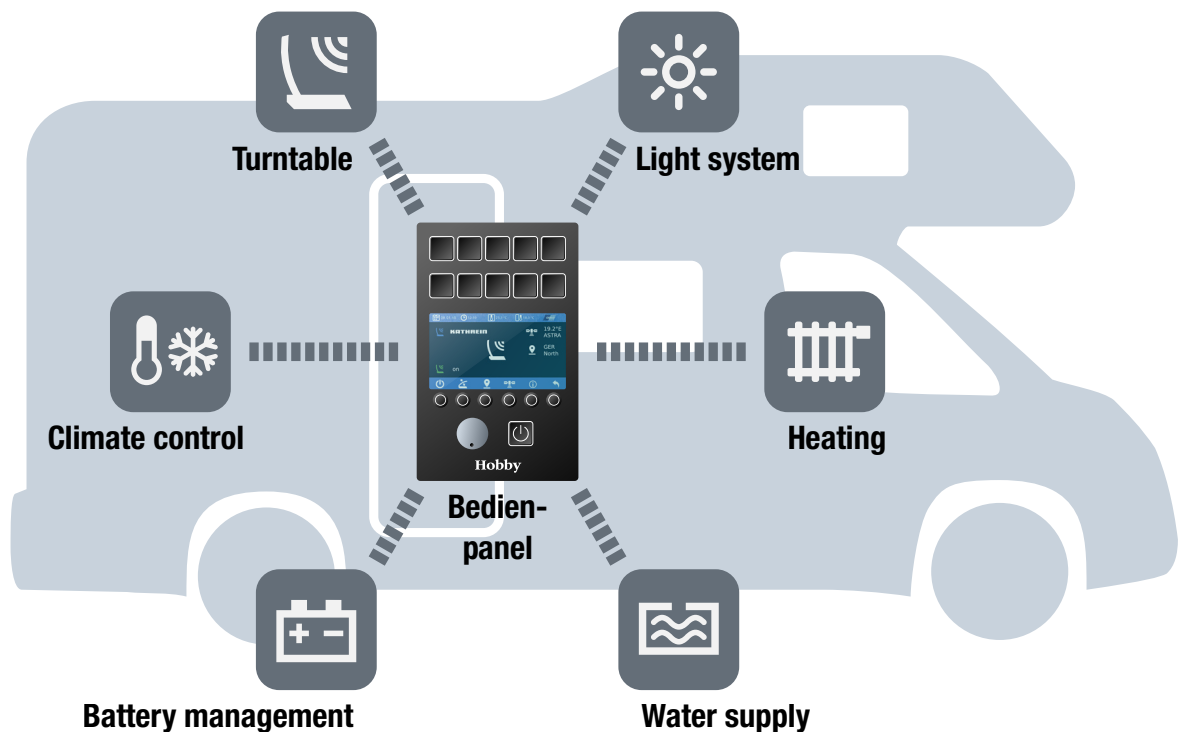
The digital lifestyle has also reached into caravans and mobile homes. The caravanning industry interface bus (CI-BUS) allows all electrical equipment that conforms to that standard to be easily connected to a central control unit.

Kathrein will ensure that in this way campers will in future be able to optimise their reception of broadcasts. Because they have an additional adapter, our CAP x50 GPS receiver-independent antennas are CI-BUS-capable and thus gives you an easy option for integration into CI-BUS

systems. Mobile homes and caravans from the company Hobby have been the first to make use of a CI-BUS-capable fully automatic antenna. These are available with the CAP 650 GPS as an exclusive special accessory.

Of course we seek to ensure that our products, including those with central control units, include a CI-BUS interface. So thanks to our cooperation with the company DOMETIC, our fully automatic antennas can be controlled using the DOMETIC central control unit.

➤ **DOMETIC**



Accessories and DVB-T2 antennas

> External control unit for the CAP x50 GPS range HDS 50

The HDS 50 external control unit allows you to control the CAP 650 GPS, 750 GPS, 850 GPS and 950 antennas easily and conveniently, even when no receiver or TV set is switched on. Other functions are available in addition to the ability to select satellites and to lower the antenna into the park position. These functions can be called up via a highly intuitive menu. An LC display provides the necessary overview.

- Compatible with the CAP x50 GPS range
- No power supply of its own required
- Easy wall mounting
- Including 3-m connection cable
- Dimensions (W × H × D in mm): 227 × 38 × 172



> Control unit CAP converter V2

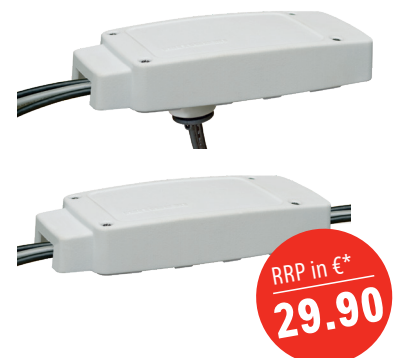
The CAP converter is included in the scope of supply of the CAP x50 and CAP 500M plus fully automatic antennas, and also in the scope of supply of the HDS 166 plus antenna set. It then serves as the central control unit. As an individual product it is particularly recommended for customers who wish to convert their CAP antenna with a receiver into a solution independent of a receiver. Furthermore the CAP converter and the UFZ 131/132 WLAN stick also allow the HDS 166 antenna set to be expanded to include the functions live TV on the smartphone/tablet and alignment using the voice wizard.



> Caution! A firmware update for the turntable is necessary for converting the CAP systems (6xx, 7xx or 9xx) to the CAP converter. This update can be performed by our service workshops.

> Roof pass-through HDZ 100

- Protective casing for cable interfaces
- Suitable for cable continuation on the roof
- For a maximum of two RF cables and one DC cable
- Optimised for CAP systems
- Easy installation
- Unused cable gland entries can be blocked by integral sealing plugs
- Cable duct connection point size: up to 29× 17 mm



* KATHREIN Digital Systems GmbH recommended retail price

> **WLAN/USB adapter**

UFZ 132

WLAN/USB adapter for live TV/radio streaming on mobile terminals in conjunction with the free CAP control app (iOS and Android); IEEE 802.11n; WLAN hotspot

- Supports the Wireless Standards IEEE 802.11a/b/g/n with a data rate up to 433 Mbps
- No additional software required
- Supports 2, 4 and 5 GHz ISM bands (dual band)
- Supports 64/128-bit WEP, WPA, WPA2 encryption
- Power supply via the USB port
- Suitable for CAP converters and alphanetics TV-sets



> **Outdoor outlet socket**

EV 06

Outdoor outlet socket with 5-m coaxial cable, port: F-type connector



> **Active DVB-T2 antennas**

BZD 30/32/40



Active DVB-T/-T2 indoor antenna BZD 30

- Remote power supply (5 V/30 mA) is performed from the DVB-T2 receiver via the coax cable
- Incl. 2 m long connecting cable
- Integrated blocking filter against GSM and LTE interference



Active DVB-T/-T2 indoor antenna BZD 32

- Remote power supply (5 V/30 mA) via the 3 m USB remote supply cable, e.g. from the TV set
- Integrated blocking filter against GSM and LTE interference



Active DVB-T/-T2 outdoor antenna BZD 40

- Remote power supply (5 V/30 mA) is performed from the DVB-T2 receiver via the coax cable
- Accessories: Fastenings for wall or mast mounting, 10 m connecting cable, F-type connector and IEC connector

* KATHREIN Digital Systems GmbH recommended retail price

> SAT jointed masts and tripod stand

HDM 140, 141, 143, HDS 100

SAT jointed tripod masts allow optimum erection and rapid alignment of the BAS 66 planar antenna from inside the vehicle. The jointed masts are of rust-proof and seawater-resistant duralium; the joint heads are

of die-cast aluminium. In conjunction with the BAS 66, this is the manual alternative to the automatic system. The maximum permissible vehicle speed is 130 km/h.



RRP in €*
229.-

Mast HDM 140

For mounting the BAS 66 planar antenna on a caravan or mobile home, 103 cm long



RRP in €*
229.-

Mast HDM 141

Like the HDM 140, but a shorter version, 76.5 cm long



RRP in €*
179.-

Mast HDM 143

For converting a terrestrial reception system into a SAT reception system with the BAS 66 planar antenna



RRP in €*
99.-

HDM 135 duralium mast

Length 2 m, diameter 35 mm, with attachment bracket and roof gland



RRP in €*
69.-

HDS 100 SAT tripod mast stand

Ideal for variable erection of the BAS 65 or KEA 650 SAT antennas, extendable rotating extension for simple alignment of the antenna in the installed state, Alu tripod stand with 1.5 mm wall thickness (lightweight and very stable), Securing pegs for stabilisation on the ground, incl. carrying bag

* KATHREIN Digital Systems GmbH recommended retail price



Spare parts for many products in the "Camping and Caravan" range are available from the Kathrein factory repair centre CSS Caravan-Sat-Service GmbH (the address can be found on page 48).

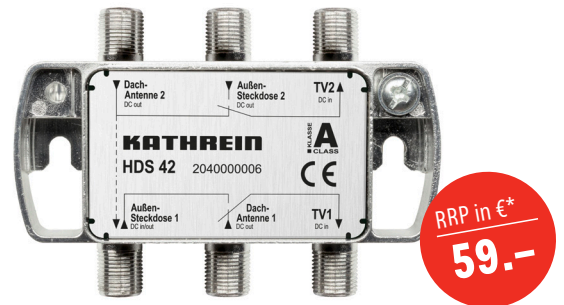
> Master/slave switch

HDS 42

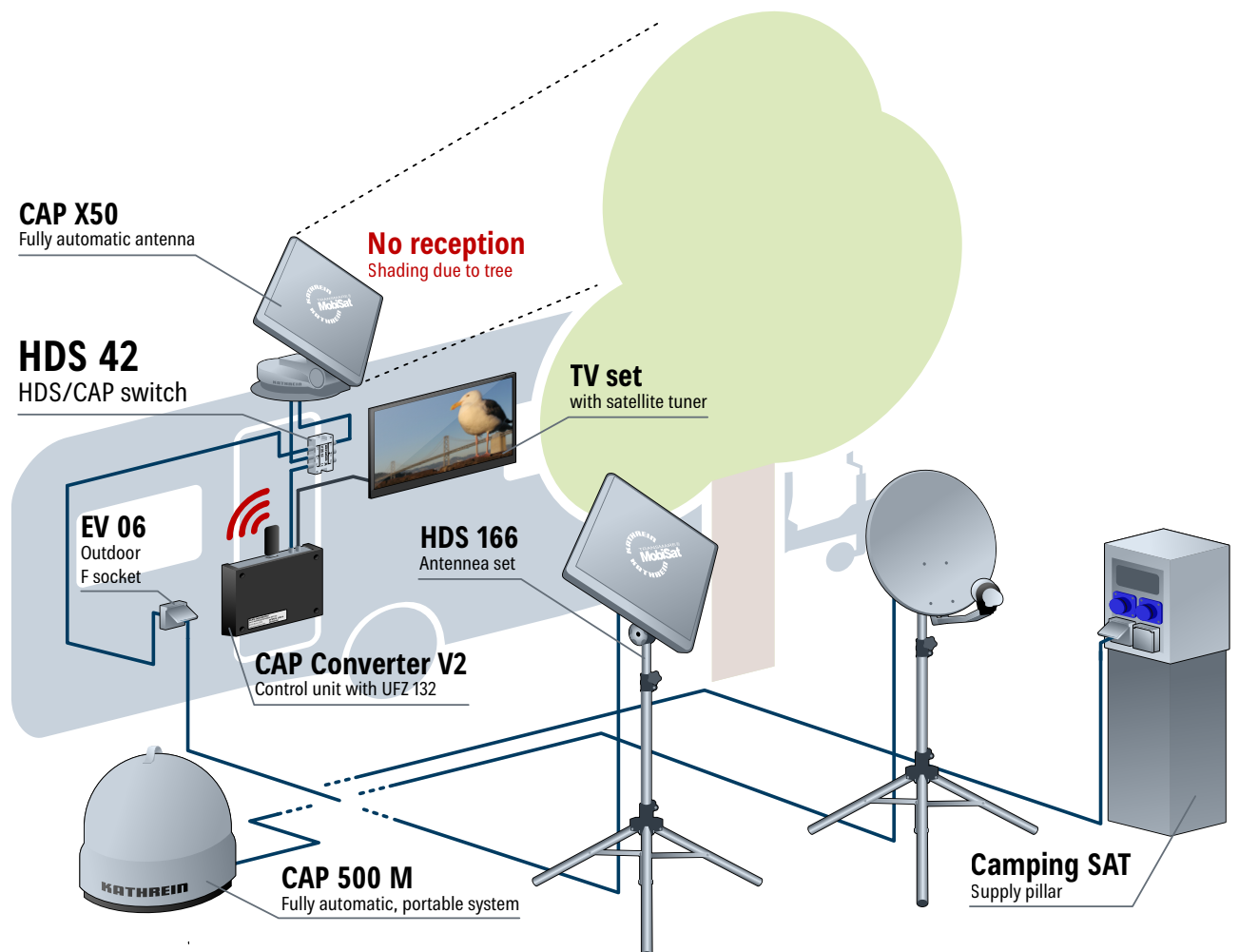
The HDS 42 master/slave switch was developed for customers who have an offset antenna in addition to a fully automatic antenna, or who want to make use of a SAT signal available at the location.

The HDS 42 connects the two systems and automatically detects which system is currently receiving a signal. The highlight of this solution is that there is no need to change over the cables.

As the CAP converter acts as a central unit, the free CAP control app can be used across both reception paths. You can use the app to view freely receivable transmitters on a smartphone or tablet.



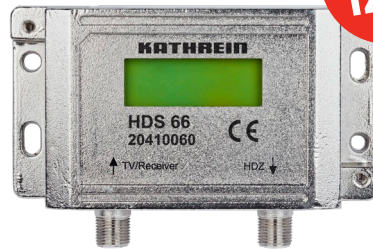
* KATHREIN Digital Systems GmbH recommended retail price



> Display unit

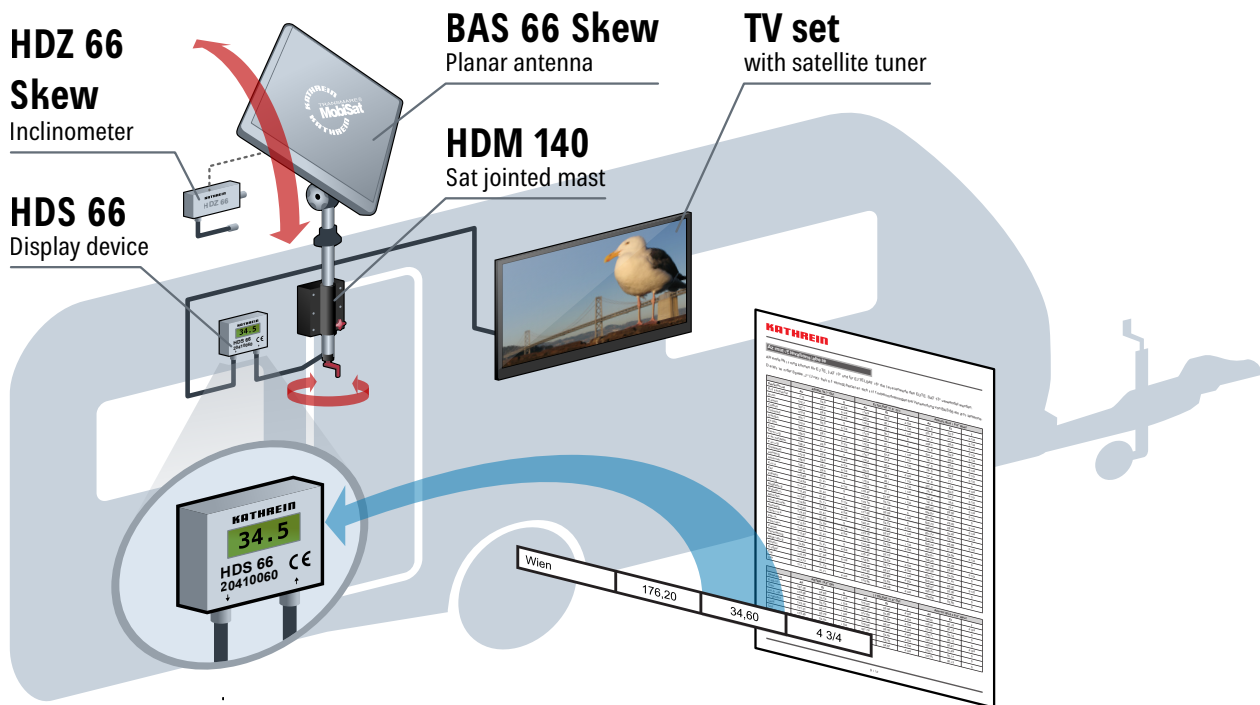
HDS 66

- Displays the actual elevation from the HDZ 60 or HDZ 66 elevation indicator
- The display backlighting switches off automatically if the elevation does not change (energy-saving mode)
- The display backlighting switches on automatically when the elevation is changed
- Easy wall mounting



RRP in €*
129.-

Alignment of the planar antenna with HDS 66



* KATHREIN Digital Systems GmbH recommended retail price

Technical data

Type	CAP converter V2
Order no.	204500001
Sat IF band [MHz]	950-2150
Input level range [dB μ V]	44-83
Modulation, FEC, demultiplexer	DVB-S(2)
Input data rate [MSymb/s]	2-45 (30 for DVB-S2/8PSK)
Supply voltage (car battery) [V]	10.5-30.0
Power consumption at 230V (max./typ. operation/stand-by) [W]	14/12/0.2
LNB supply (horiz./vert.) [V/mA]	14/18; max. 400
Antenna	1 \times F socket
TV/STB	1 \times F socket
Control signals supported (TV input)	DiSEqC™1.0/22 kHz; 14/18 V
USB	1 \times 2.0
Ethernet	1 \times RJ45
Control unit	1 \times RJ12
Permissible ambient temperature [° C]	-10 to +45
Weight net/gross [kg]	0.5/0.65
Dimensions device/packaging (W x H x D) [mm]	227 \times 38 \times 172/260 \times 90 \times 206

Type	UFZ 132
Order no.	204500005
Standard	IEEE 802.11ac/a/b/g/ng
Port	USB 2.0
Data rates [Mbps]	11b: 1/2/5.5/11
Data rates [Mbps]	11g: 6/9/12/24/36/48/54
Data rates [Mbps]	11n: up to 300
Operating temperature [° C]	-20 to +70
Dimensions device/packaging (W x H x D) [mm]	29.3 \times 7.5 \times 15/95 \times 147 \times 15
Weight [kg] net/gross	0.02/0.05

Type	BAS 66 Skew	BAS 65
Order no.	2000000001	20010032
Application	Mobile use	Stationary use
Installation of	HDM 140, 141, 143	Wall, mast, boom, flat surface
Reception range [GHz]	Switchable: 10.70-11.70 (0 kHz) - 11.70-12.75 (22 kHz)	
Polarisation	Switchable: Vertical (14 V), Horizontal (18 V)	
Gain [dB]	> 55	
Half-power beam width [°] ¹⁾	Typical < 3	
LNB	2 switchable outputs	
Output frequency [MHz]	950-1950/1100-2150	
Oscillator frequency (L.O.) [GHz]	9.75/10.6	
Supply voltage LNB [V]	Vertical: 11.5-14.0 – Horizontal: 16.0-19.0	
Max. power consumption [mA]	220	
Wind load [N] ²⁾	240	
Mast clamping range [mm]	–	38-50
Setting range, elevation [°]	0-90 (HDM 14x)	0-50
Setting range, azimuth [°]	360	± 65 (wall mounting), 360 (mast installation)
Dimensions net/gross [mm]	500 × 500 × 109 (without support)/600 × 600 × 200	500 × 500 × 121 (without support)/600 × 600 × 200
Weight net/gross [kg]	5.9/7.5	6.5/8.5

¹⁾ At mid-band ²⁾ At a dynamic pressure of 800 N/m² in accordance with EN 60728-11

Type	CAP 850 GPS HDP 850 GPS	CAP 750 GPS HDP 750 GPS	CAP 650 GPS HDP 650 GPS
Order no.	203500001 204500003	20310056 20410084	20310055 20410083
Diameter parabolic reflector approx. [cm]	85	60	–
Space required radius/height [cm]	90.8/98.8	80.7/84	88/70
LNB	2 switchable outputs: V/H (14/18 V) Low/High (0/22 kHz)		
Supply voltage LNB [V]	Vertical: 11.5-14 – Horizontal: 16-19		
Input frequency [GHz]	10.70-12.75		
Output frequency [MHz]	950-1950/1100-2150		
Oscillator frequency (L.O.) [GHz]	9.75/10.60		
Supply voltage (car battery) [V]	10.5-15.5		
Current consumption from the vehicle's 12 V supply [A]	Typical 3		
Current consumption from the receiver [mA]	Typical 160		
Setting range: Elevation/Azimuth/Skew [°]	0-65/370/±45	0-75/370/±45	0-80/370/±15
Weight of the turntable with parabolic reflector/planar reflector [kg]	11.8/–	9.7/–	–/14.5
Packaging dimensions (W x H x D) [mm]	934 × 985 × 384	620 × 815 × 268	599 × 582 × 373
Weight net/gross [kg]	15.7/21.7	13.3/17.2	17.2/22.35

Type	CAP 500M CAP 500 Plus	
Order no.	203500003 203500004	
Input frequency [GHz]	10.7-12.75	
Polarisation	horizontal/vertical	
Antenna gain [dBi]	31.0	
EIRP min. [dbW]	51	
Satellite search time typ. [s]	90	
LNB outputs	1	
LNB output frequency [MHz]	950-2150	
Supply voltage [V]	13-18	
Power consumption [W]	5.4 (during the search process)	
L.O. Frequency [V DC]	9.75/10.6	
Dimensions net/gross [mm]	450 × 450 × 440/535 × 535 × 495	
Weight net/gross [kg]	4.7/8.0	5.4/9.0

Type	CTS SL-32 DSBAI+K	CTS SL-27 DSBAI+K	CTS SL-24 DSBAI+K	CTS SL-22 DSBAI+K
Order no.	204500010	204500009	204500008	204500007
Screen size [cm (")]	80 (32")	68.5 (27")	60 (24")	55 (22")
alphatronicsView wide-angle LED display 178°/178°	E LED display			
Picture format	16:9 wide-screen			
Resolution	1920 × 1080 full HD			
Contrast ratio	3000:1	1000:1		
Brightness value	250 cd/m2	230 cd/m2	250 cd/m2	300 cd/m2
Response time [ms]	< 5			
Viewing angle [H, V]	178, 178			
tuner	PAL B/G, NTSC, SECAM			
Sound, music performance [W]	2 × 5			
Power supply unit (external) [AC,DC]	100-240-V AC, 12 DC			
Dimensions (W × H × D) with stand/ without stand/ gross [mm]	732 × 476 × 213/ 732 × 437 × 61/ 816 × 520 × 143	622 × 408 × 175/ 622 × 376 × 55/ 680 × 445 × 125	552 × 370 × 154/ 552 × 340 × 54/ 630 × 405 × 118	503 × 343 × 154/ 503 × 312 × 53/ 580 × 375 × 11
Weight with stand/without stand/ gross [kg]	6.75/6.7/8.8	5.2/4.7/6.7	4.2/3.9/5.7	3.7/3.4/5
Energy efficiency class	F			
Power consumption [kWh/1000h]	32/26/22/20			
Casing colour	brushed anthracite			

Type	HDS 166	HDS 166 plus
Order no.	20310052	2030000002
Dimensions of the tripod stand, (height, stand diameter, tube diameter [mm])	1500 max., 1200 max., 35	
Dimensions of the antenna BAS 66 Skew (W × H × D) [mm]	495 × 495 × 120	
Weight of the tripod stand [kg]	approx. 2.4	
Weight of the BAS 66 Skew with adapter joint	approx. 6.4	
Weight of the set (net/gross)[mm]	13.8/15.1	
Packaging dimensions (W × H × D) [mm]	177 × 792 × 1030	

Type	BZD 30	BZD 32	BZD 40
Order no.	20710002	20710013	20710005
Reception range [MHz]	174-230/470-790	174-230/470-790	174-230/470-862
Figure of merit [dB/K] ¹⁾	Typical -28.5	Typical -28.4	Typical -32
Gain [dB]	B III: 18, B IV/V: 15	B III: 18, B IV/V: 15	B III: 18, B IV/V: 15
Max. output level [dBμV] ²⁾	Typical 95	Typical 95	95
Permissible remote power feed [V]	5	5	5-25
Dimensions [mm]	140 × 195	140 × 195	204 × 196 × 71 ³⁾
Packaging unit/weight [pc./kg]	1 (10)/0.5	1 (10)/0.5	1 (10)/1.23
Single pack dimensions [mm]	245 × 160 × 70	245 × 160 × 70	250 × 210 × 80

¹⁾ Bandwidth 8 MHz, Tu 290 K, connection cable a = 3.5 dB, receiver LF = 7 dB @ 560 MHz

²⁾ Measured at the antenna output in accordance with EN 60728-5 for 60-dB intermodulation distance (2 transmitters – 3rd order)

³⁾ with bracket

Type	CAR 150 WIFI DUO router
Antenna connections	2 × SMA for LTE/2 × RP-SMA for WLAN/1 × SMA for GPS
Ethernet ports	3 × LAN, 1 × WAN
Other ports	1 × USB host, 1 × microSD
Mobile telephony standards	4G/LTE (cat. 4), 3G, 2G
WLAN standard	IEEE 802.11b/g/n
WiFi security	WPA2-PSK
Input voltage range [V]	9-30
Current consumption, typical [mA]	170
Power consumption typical [W]	2
Permissible ambient temperature [° C]	-40 to +75
Dimensions (W × H × D) [mm]	109 × 50 × 103
Weight [kg]	0.295
Type	CAR 150 WIFI DUO antenna
GNSS	
Frequency range [MHz]	1575.42-1610
Polarisation	RHCP
LNA gain [dB]	28 ±2
Impedance [Ω]	50
Ports	SMA plug
LTE	
Frequency range [MHz]	698-960/171-2690
Polarisation	Linear
Gain [dBi]	3
Impedance [Ω]	50
Ports	2 × SMA plugs
WiFi	
Frequency range [MHz]	2400-2483.5/4900-5825
Polarisation	Linear
Gain [dBi]	2
Impedance [Ω]	50
Ports	2 × RP-SMA plugs
Mechanical data	
Protection class	IP67
Weight [kg]	approx. 0.55
Dimensions (W × H × D) [mm]	∅ 110 × 55

Type	DAB+ 1 mini	DAB+ 10 tower	DAB+ 100 highline
Display	OLED display	2.4 inch colour display	3.2 inch colour display
Frequency range	UKW 87.5–108 MHz		
	DAB+ 174.928–239.200 MHz		
Antenna system	Dipole antenna 3.5 mm jack input	Dual band WiFi built-in antenna, DAB/FM telescopic antenna	Dual band WiFi external antenna, DAB/FM telescopic antenna, F socket
Favourites memory	10 DAB+, 10 FM	30 memory slots (10 Internet radio, 10 DAB+, 10 FM)	
RMS output power	1.6 W	7 W	2 × 7 W
Audio equaliser	–	Flat/Jazz/Rock/Movie/Classic/Pop/News/My EQ	
AUX input	3.5 mm stereo		
Headphone socket	–	3.5 mm stereo	
Optical digital output	–	S/PDIF stereo	
Wired Ethernet	–	10/100 MBit/s RJ45 port	
WiFi to IEEE 802.11 a/b/g/n	2412–2472 MHz, 5180–5240 MHz		
Bluetooth specifications	Bluetooth® 4.1	Bluetooth® 4.0	Bluetooth® 4.0
Supported profile	A2DP		
Bluetooth audio CODEC	SBC	aptX, SBC and AAC	
Playback formats	–	Compatible with MP3, AAC+ and WMA	
Recording function	–	MP3 recording on a USB stick and SD card	
CD playback function	–	CD player WMA and MP3	
Internet streaming	–	UPnP/DMR music streaming (DLNA 1.5)	
Streaming providers	–	Spotify, Deezer, Tidal, Napster, Qobuz	
Sound quality improvement	–	Qualcomm® aptX™ audio	
Sleep Timer	Yes		
Alarm clock function	–	Yes	
Battery/rechargeable battery	Integral rechargeable battery	Battery operation and rechargeable battery operation	–
	Rechargeable lithium-ion battery, 2600 mAh	6 × AA batteries can be changed over to NiMH rechargeable batteries with recharge function	–
General			
Power supply/charging port	Micro-USB port 5 V 1 A	External power supply unit (supplied): 240 V/AC 50/60 Hz 1.0 A/ 12 V/ DC 1.5 A	Internal power supply unit: 240 V/AC 50/60 Hz 1.5 A/ 12 V/DC 1.5A
Charging current	500 mA		
Operating temperature	0 °C to +35 °C	0 °C to +40 °C	
Remote control	–	Batteries 2 × AAA	
Android & Apple supported app	–	Connection to the UNDOK™ app	
Dimensions (W × H × D) [mm]	116 × 73.5 × 65	134 × 216 × 136	365 × 122 × 252
Weight net/gross [kg]	0.39/0.77	1.6/1.95	4.1/5.96
Packaging dimensions (W × H × D) [mm]	168 × 80 × 155	190 × 325 × 190	450 × 225 × 340

Advice and service

> Caravan service partners

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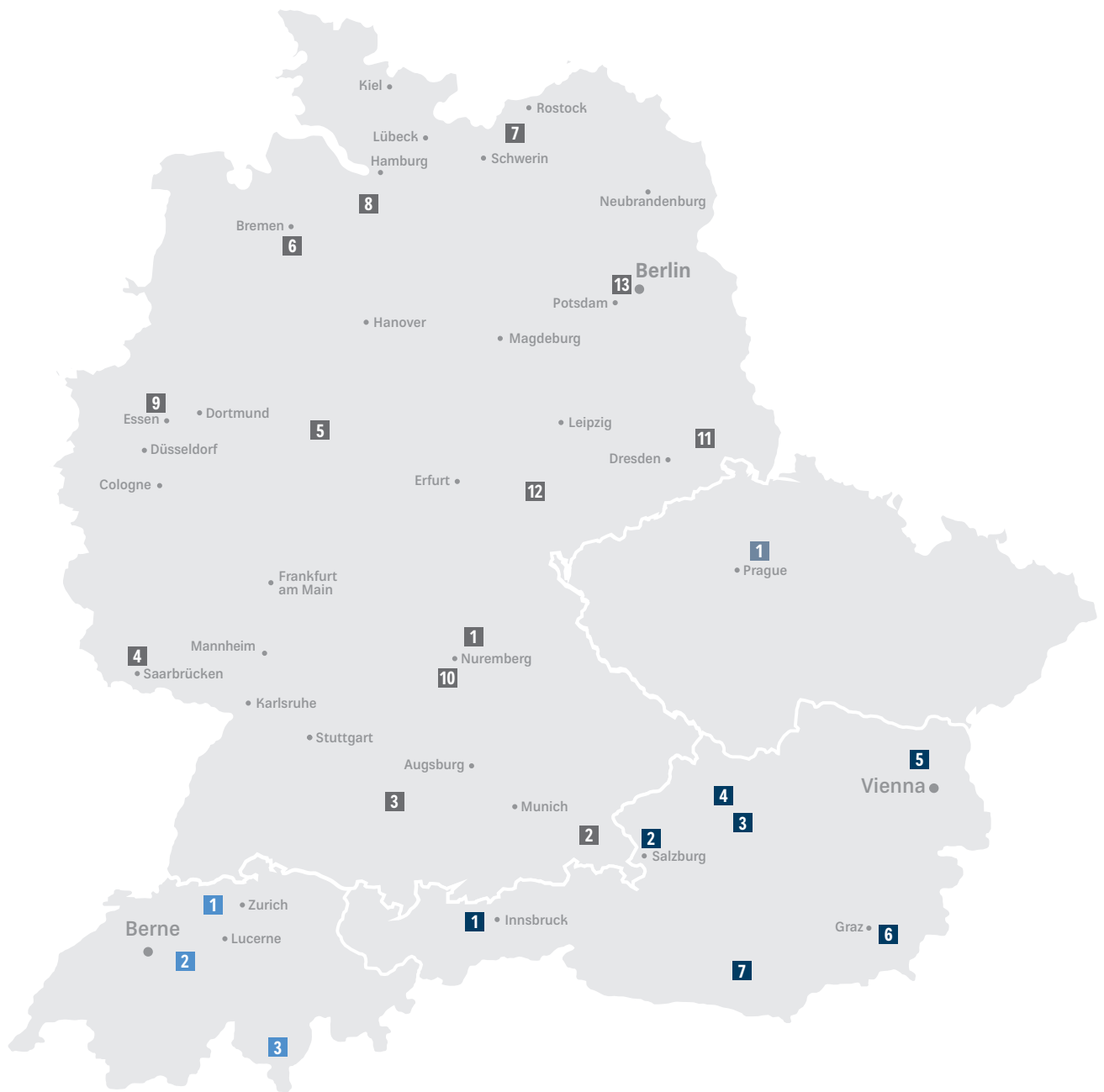
> We're looking for you!

Would you like to become a Kathrein Caravan service partner?

Please apply at:

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See www.kathrein-ds.com/support/kundenberatung for further information on the subjects of service and support





Our award-winning DAB+ radio receivers

> DAB+ 1 mini

When you buy the DAB+ 1 mini you acquire a small portable FM/DAB+ radio with excellent sound quality. Additionally equipped with Bluetooth for wireless audio streaming, it leaves nothing to be desired for streaming from a mobile phone on to the radio. An integrated rechargeable battery, an OLED display and an antenna socket for an external dipole antenna perfectly complement the features of the smallest member of our DAB+ range. The DAB+ 1 mini is available in four housing colours – classic in white or silver, or light or dark genuine wood finish.

Features

- DAB+ and FM
- Bluetooth for audio streaming
- OLED display with display of DAB service and information
- Integral rechargeable battery
- Including an antenna cable (dipole antenna) (3.5-mm jack cable) and USB port cable (USB micro) for charging (5 V/1 A)

Available in the following colours:



Dark wood



Light wood



White



Silver



RRP in €*
139.-



Illustration actual size



services

- Additional multi-media
- Streaming via Bluetooth
- Digital sound quality

> **DAB+ 10 tower**

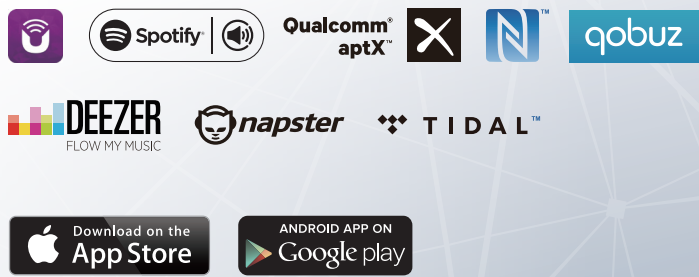
The DAB+ 10 tower brings you a modern portable FM/DAB+/Internet radio. As well as Bluetooth for wireless audio streaming, our tower radio is equipped with WLAN and is thus enabled to receive Deezer, Tidal, Napster, Qobuz and Spotify Connect together with Internet radio. Of course the tower offers even more features such as an alarm clock, sleep timer, pairing by NFC or for instance control using the UNDOK™ app. With an integral battery/rechargeable battery charging slot (switchable) there's nothing to stop you using the radio far away from a power socket.

Features

- Internet radio/DAB+/UKW-RDS
- Deezer, Tidal, Napster, Qobuz and Spotify Connect
- Bluetooth for audio streaming
- UNDOK™ app for playback activation
- UPNP/DMR music transmission
- Backlit 2.4" colour display
- Output power: 1 × 10 W (RMS)
- Power supply unit DC 12 V/1.5 A with switchable charger for rechargeable batteries or standard batteries (rechargeable batteries/standard batteries not supplied)



RRP in €*
269.-



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