



## Meinberg Radio Clocks

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## ADU/FOS/MP: Fiber-optic GPS antenna splitter for secure signal transmission over long distances

ADU is an antenna distribution unit for connecting a Meinberg GPS antenna/converter (GNSS|IF|15V DC) to several Meinberg GPS receivers (up to eight receivers) via single mode fiber lines.

### Key Features

- large antenna cable distances - up to 10km. using a continuous connection with a fiber type of category OS2 (0.4dB/km)
- no destructive overvoltage via the antenna cable
- no unintentional monitoring possible via optical fiber
- Option: Redundant power with AC/DC and/or DC power supplies

### Description

The ADU system must be mounted inside the building and connected to the Meinberg GPS converter antenna via a coaxial cable.

The GOAL-S-R module is connected on receiver side to the GPS antenna input of the receiver via a coaxial cable and can be mounted close to the connected receiver.

The two modules (ADU and GOAL-S-R) are interconnected via E9/125µm single-mode fiber. This type of antenna connection has the following advantages:

- \* long antenna cable runs possible (up to 10 km)
- \* no danger caused by overvoltage damage via the antenna cable
- \* tap-proof security communication through fiber optic connection

The GOAL-S/R modules installed on receiver side are powered by the Meinberg GPS-IF receiver via coaxial cable. The ADU/FOS/MP system installed on antenna side requires an externally supplied voltage for its own power supply as well as for feeding the connected antenna through the built-in GPS receiver.

The system is suitable for the subsequent extension of existing Meinberg GPS systems. The following GPS receivers are suitable for use with a GOAL-S Antenna Link:

GPS180

GPS180SV

GPS180PEX

GPS180AMC

GPS180XHS

GNS181-UC

and older receivers of the series GPS163, GPS164, GPS165, GPS167, GPS168, GPS169 and GPS170 (but not GPS166!).

## Characteristics

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<b>Type of Antenna</b>	Input for Meinberg GPS antenna, antenna circuit 1000 V DC insulated
<b>Optical Outputs</b>	SC-APC connector for connecting an E9/125µm SMF  * <b>wave length:</b> 1550nm (transmit)  * <b>coupling optical power:</b> max. 100µW (-10dBm), typ. 50[µW (-13dBm)

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## Electrical Connectors

- \* SC-APC connector (FO Link)
- \* N-Norm socket (Meinberg GPS-IF Receiver)
- \* Error relay output, change-over contact, 3pin DFK connector
- \* power supply via 5pol. DFK connector (ADU/MP only)
- \* ground terminal via 6.3mm flat plug (GOAL-S/R only)

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<b>Operating Voltage</b>	100-240 V AC / 50/60Hz 100-200 V DC power consumption: 20W max.  <b>Option:</b> DC power supply (20-60 V DC or 10-36 V DC) Power redundancy with AC/DC and/or DC power supplies
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<b>Form Factor</b>	ADU/MP: 19 inch metal chassis, 1 U/84 HP (Multipack) GOAL-S/R: anodized aluminum housing with aluminum front and back wall with clamp for 35mm DIN-railmount protection class: IP30
<b>Physical Dimensions</b>	ADU/MP: 483 mm x 43 mm x 285 mm (width x height x depth) GOAL-S/R: 28mm x 69mm x 85mm (height x width x depth)
<b>Supported Temperature</b>	0 ... 50° C
<b>Supported Humidity</b>	Max. 85 % (non-condensing) at 40 °C
<b>Contents of Shipment</b>	Included in delivery are: a pre-assembled antenna cable, a Meinberg GPS antenna/converter unit, two GOAL-S/R modules (receiver side) and product documentations on USB storage device.
<b>Warranty</b>	Three-year warranty
<b>RoHS Status of Product</b>	This product is fully RoHS-compliant.
<b>WEEE Status of Product</b>	This product is handled as a B2B (Business to Business) category product. To ensure that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.

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#### Manual

There is no online manual available for this product.: [1][Contact us](#)

#### Links:

[1] <mailto:info@meinberg.de>