

Meinberg Radio Clocks

Lange Wand 9

31812 Bad Pyrmont, Germany

Phone: +49 (5281) 9309-0

Fax: +49 (5281) 9309-30

<https://www.meinbergglobal.com>

info@meinberg.de



GNSS MULTI BAND Antenna: Precision Multi Frequency Positioning

The GNSS MULTI BAND Antenna provides multi GPS L1/L2, GLONASS G1/G2/G3, Beidou B1/B2, Galileo E1/E5a+b plus L-band correction services coverage and is especially designed for precision multi frequency positioning. It provides superior multi-path signal rejection, a linear phase response, and tight Phase Centre Variation (PCV).

Key Features

- Preformed Cable
- Allows direct transmission routes of up to 150 m when using Ultraflex H2010 coaxial cable
- Antenna Mounting Kit included
- Wide frequency ranges: 1164 MHz to 1254 MHz and 1525 MHz to 1606 MHz

Description

This antenna is ideal for precision timing applications and other applications where precision matters. It features a precision tuned, twin circular dual feed, stacked patch element. The signals from the two orthogonal feeds are combined in a hybrid combiner, amplified in a wide-band LNA, then band-split for narrow filtering in each band and further amplified prior to recombination at the output.

The antenna also has a strong pre-filter to mitigate inter-modulated signal interference from LTE and other cellular bands. The antenna offers excellent axial ratio and a tightly grouped phase center variation and covers from 1164 MHz to 1254 MHz and 1525 MHz to 1606 MHz.

Included in delivery is a Meinberg GNSS MULTI BAND Antenna incl. mounting kit, pre-assembled antenna cable and optional a Surge Voltage Protector MBG S-PRO.

GNSS Reception

GNSS reception can only be reliable if the antenna has a free view of the sky, therefore it needs to be installed at a suitable location, e.g. on a rooftop. The unit is remotely powered by the connected GNM receiver (via the antenna cable).

Characteristics

Frequency Range

Frequency ranges:

1164 MHz to 1254 MHz and
1525 MHz to 1606 MHz

Overall LNA Gain:

37 dB typ, 35 dB min

LNA Noise Figure:

2.5 dB typ at 25 °C

Out-of-Band Rejection:

Freq. Band E5/L2/G2 | Frequency Gain

45 dB

30 dB

> 1350 MHz | > 45 dB

Freq. Band L1/E1/B1/G1 | Frequency Gain

30 dB

> 1690 MHz | > 30 dB

> 1730 MHz | > 40 dB

Antenna Connector

Type-N connector

Operating Voltage	5 V to 16 V, @ 24 mA (provided via antenna cable)
Form Factor	ABS plastic case for outdoor installation
Physical Dimensions	Dimensions of the GNSS MULTI BAND Antenna - [1] see datasheet .
Product Weight	1.6kg with mounting kit (Antenna cable 0.1kg / per meter)
Supported Temperature	-40 °C to 85 °C (-40 °F to 185 °F)
Warranty	Three-year warranty
RoHS Status of Product	This product is fully RoHS-compliant.
WEEE Status of Product	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.

Manual

The English manual is available as a PDF file: [2][Download \(PDF\)](#)

Links:

[1] <https://www.meinbergglobal.com/english/products/>

[2] <https://www.meinbergglobal.com/download/docs/manuals/english/gnss-multi-band-antenna.pdf>