

## Cable Equalizer

### Features

- compact design
- robust mechanic
- lead free

### Applications

- signal distribution systems
- cable equalization



### Overview

In-house installations (such as broadcast signal distribution systems) often require long RF cable routes. As a result, the higher frequencies are attenuated compared to lower frequencies. C-EQU was designed to compensate this issue. It is a valuable addition to the wideband signal distribution unit WSDU for factory installations with extended cable routes.

### Suitable for All Broadcast Standards

The wide frequency range covers AM/FM, DAB, DVB-T and all GNSS frequencies such as GPS, GLONASS and GALILEO.

### Easy Installation

The compact design and low weight of C-EQU allows mounting the equalizer directly to the SMA connectors on the rear side of the WSDU components. The small diameter also enables installation inside cable ducts. A SMA female to male adapter is included in delivery.

### Individual Equalization

Further equalizer types are available on demand.

## RF Specifications

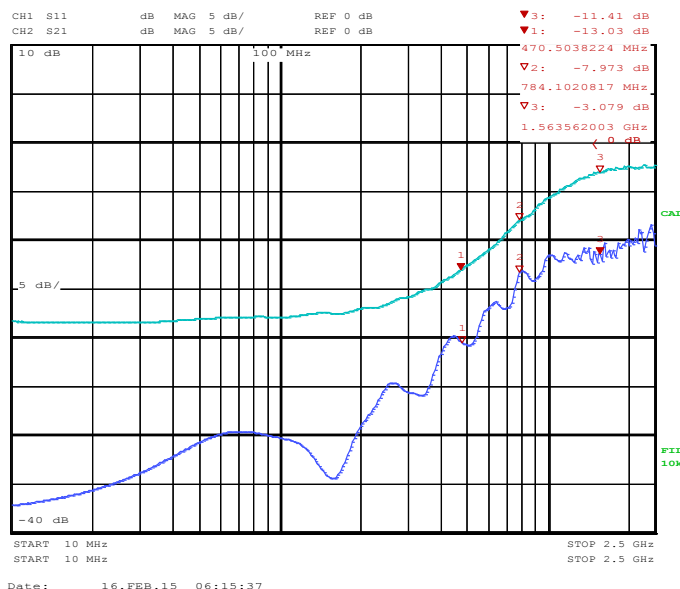
| Parameter                       | Symbol             | Min.       | Typ. | Max. | Unit | Condition                    |
|---------------------------------|--------------------|------------|------|------|------|------------------------------|
| impedance                       | $Z_{in} / Z_{out}$ |            | 50   |      | Ohm  |                              |
| low frequency                   | $f_{min}$          |            | 0    |      | Hz   |                              |
| high frequency                  | $f_{max}$          | 2500       |      | 4000 | MHz  |                              |
| return loss                     | $S_{11}, S_{22}$   |            | -15  |      | dB   |                              |
| insertion loss                  | $S_{21}$           |            | -18  |      | dB   | FM Band, $f_c = 100$ MHz     |
|                                 | $S_{21}$           |            | -17  |      | dB   | DAB-3 Band, $f_c = 200$ MHz  |
|                                 | $S_{21}$           |            | -8   |      | dB   | DVB-T Band, $f_c = 780$ MHz  |
|                                 | $S_{21}$           |            | -3   |      | dB   | GNSS Bands, $f_c = 1575$ MHz |
| 3 <sup>rd</sup> order intercept | OPIP3 <sup>1</sup> | 46         |      |      | dBm  | $f < 1000$ MHz               |
|                                 | OPIP3 <sup>1</sup> | 42         | 44   |      | dBm  | $f > 1000$ MHz               |
| RF connectors                   |                    | SMA female |      |      |      |                              |

Note 1: tested at  $P_{out} 2 \times +20$  dBm

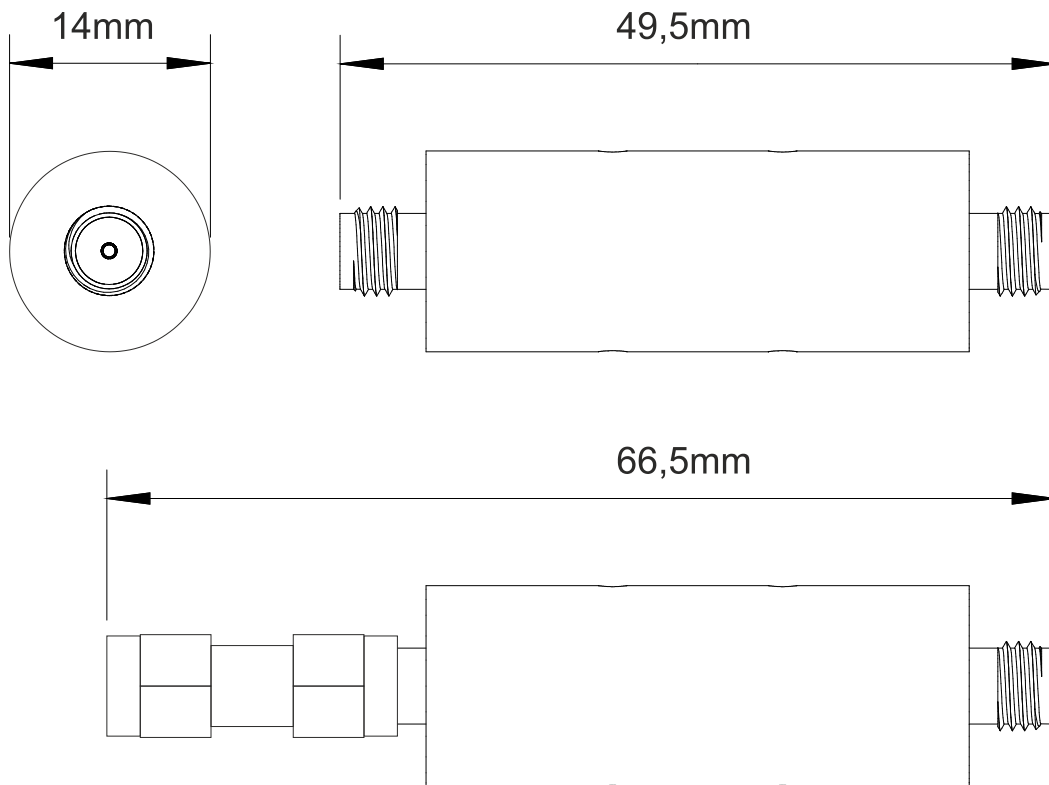
## Common Specifications

| Parameter             | Symbol    | Min.                 | Typ. | Max.        | Unit | Condition           |
|-----------------------|-----------|----------------------|------|-------------|------|---------------------|
| dimensions            | L x W x H | approx. 50 x 14      |      |             | mm   | length and diameter |
| weight                |           |                      | 20   |             | g    |                     |
| operating temp. range | $T_o$     | +5                   |      | +60         | °C   |                     |
| storage temp. range   | $T_s$     | -40                  |      | +70         | °C   |                     |
| ordering Information  |           | C-EQU1500HP3         |      | 1407.5002.1 |      |                     |
| included accessories  |           | adapter SMA/SMA male |      |             |      |                     |

## S-Parameters (typical responses)



## Mechanical Drawing



## Related Products

| Product | Description                             | P/N         |
|---------|---|-------------|
| WSDU1X8 | 8 Way Multicoupler 100 kHz ... 4000 MHz | 1202.6100.1 |