

C-EQU1500HP3

RF Cable Equalizer with 5 dB loss compensation between FM and GNSS

Features

- compact and rugged design

Applications

- broadcast distribution systems
- compensation of cable frequency responses



At a Glance

In-house installations (such as broadcast signal distribution systems) often require long RF cable routes. As a result, the higher frequencies are more 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 in facility installations.

Suitable for All Broadcast Standards

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

| Parameter | Symbol | Min. | Тур. | Max. | Unit | Condition |
|---------------------------------|-----------------------------------|-----------------|---------|--------------|---------------------|--------------------------------------|
| impedance | Zin / Zout | | 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 | -4.5 | -5.0 | -5.5 | dB | AM Band, f _c = 15 MHz |
| | S ₂₁ | -5.0 | -5.0 | -4.5 | dB | FM Band, f _c = 92 MHz |
| | S ₂₁ | -5.0 | -4.0 | -3.5 | dB | DAB-3 Band, f _c = 202 MHz |
| | S ₂₁ | -3.0 | -2.0 | -1.2 | dB | DVB-T Band, fc = 630 MHz |
| | S ₂₁ | -0.6 | -0.3 | 0 | dB | GNSS Band, f _c = 1575 MHz |
| | S ₂₁ | -1.5 | -1.2 | 0 | dB | SAT Band, f _c = 2332 MHz |
| 3 rd order intercept | OIP31 | +46 | | | dBm | f < 1000 MHz |
| | OIP31 | +42 | +44 | | dBm | f > 1000 MHz |
| maximum RF power | P _{RF} | | | +20 | dBm | |
| maximum DC voltage | UDC | | | 20 | V | |
| RF connectors | | SMA female | | | | |
| dimensions | WxD | approx. 50 x 14 | | mm | length and diameter | |
| weight | | 20 | | g | | |
| operating temp. range | To | +5 | | +60 | °C | |
| storage temp. range | Ts | -40 | | +70 | °C | |
| ordering Information | P/N: | 1407.5 | 001.1 | C-EQU1500HP3 | | |
| included accessories | | adaptei | r SMA/S | MA male | | |

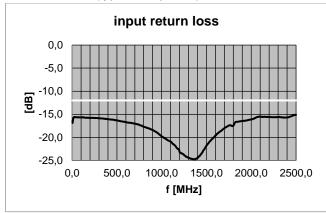
Note 1: tested at Pout 2 x +17 dBm

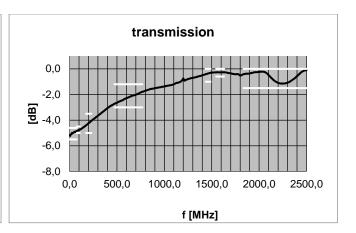
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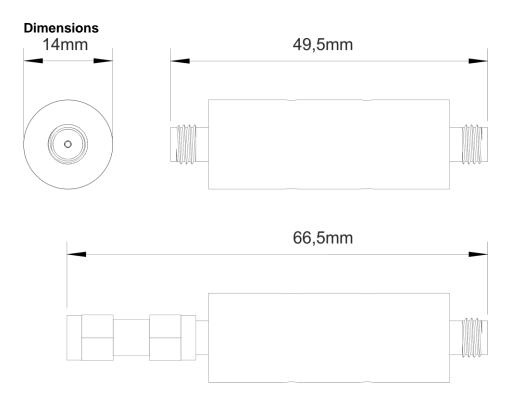




S-Parameters (typical response)







Related Products

| Product | Description | P/N |
|---------------|---|-------------|
| WSDU-1X8 | 8 Way Multicoupler 100 kHz 4000 MHz | 1202.6100.1 |
| WSDU-1X8L | High Dynamic 8 Way Multicoupler Module 100 kHz 4000 MHz | 1807.6100.1 |
| WSDU-1X8A | 8 Way High Dynamic Signal Conditioning Multicoupler 100 kHz4000 MHz | 1807.6300.1 |
| C-EQU1500HP15 | RF Cable Equalizer with 15 dB loss compensation between FM and GNSS | 1407.5002.1 |