

## 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

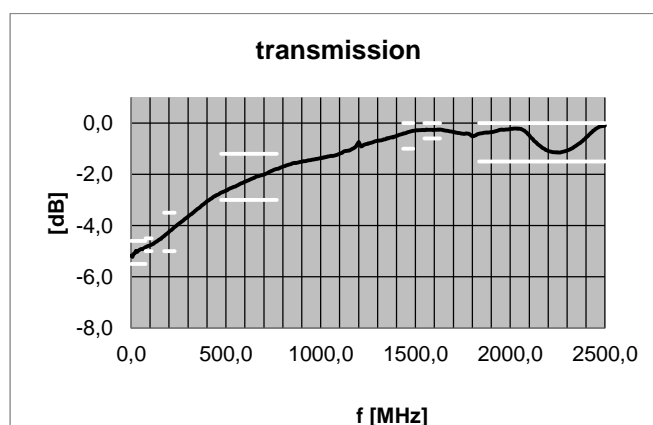
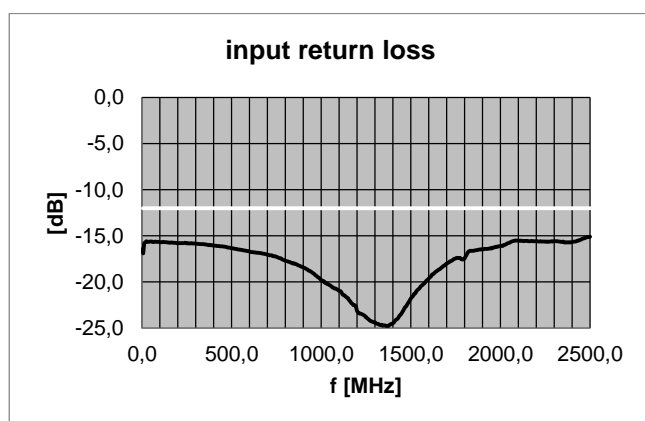
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
impedance	$Z_{in} / Z_{out}$		50		Ohm	
low frequency	$f_{min}$		0		Hz	
high frequency	$f_{max}$	2500		4000	MHz	
return loss	$S_{11}, S_{22}$		-15	-12	dB	
insertion loss	$S_{21}$	-4.6	-5.0	-5.5	dB	AM Band, $f_c = 15$ MHz
	$S_{21}$	-5.0	-4.8	-4.5	dB	FM Band, $f_c = 92$ 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, $f_c = 630$ MHz
		-1.0	-0.3	0	dB	DAB-L Band, $f_c = 1470$ MHz
	$S_{21}$	-0.6	-0.3	0	dB	GNSS Bands, $f_c = 1588$ MHz
		-1.5	-1.25	0	dB	SAT Bands, $f_c = 2332$ 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

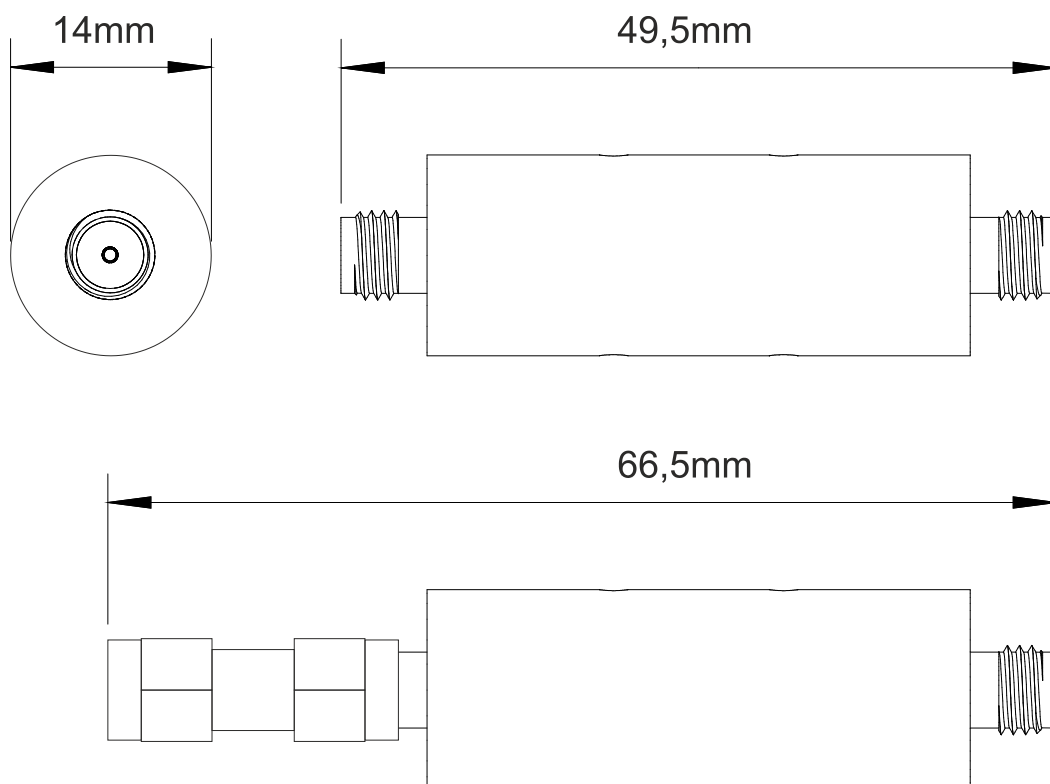
## Common Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
dimensions	L x W x H	approx. 50 x 14			mm	length and diameter
weight	m		20		g	
operating temp. range	$T_o$	+5		+60	°C	
storage temp. range	$T_s$	-40		+70	°C	
ordering Information		C-EQU1500HP3		1407.5001.1		
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