

C-EQU1500HP15

RF Cable Equalizer with 15 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.

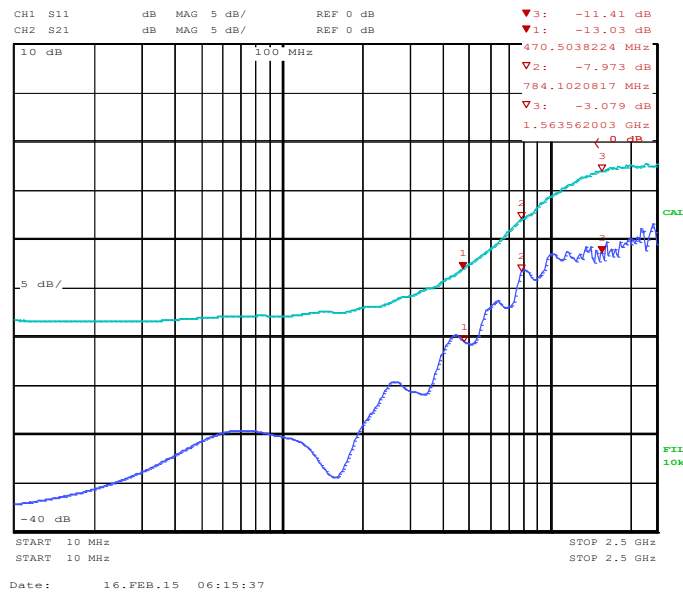
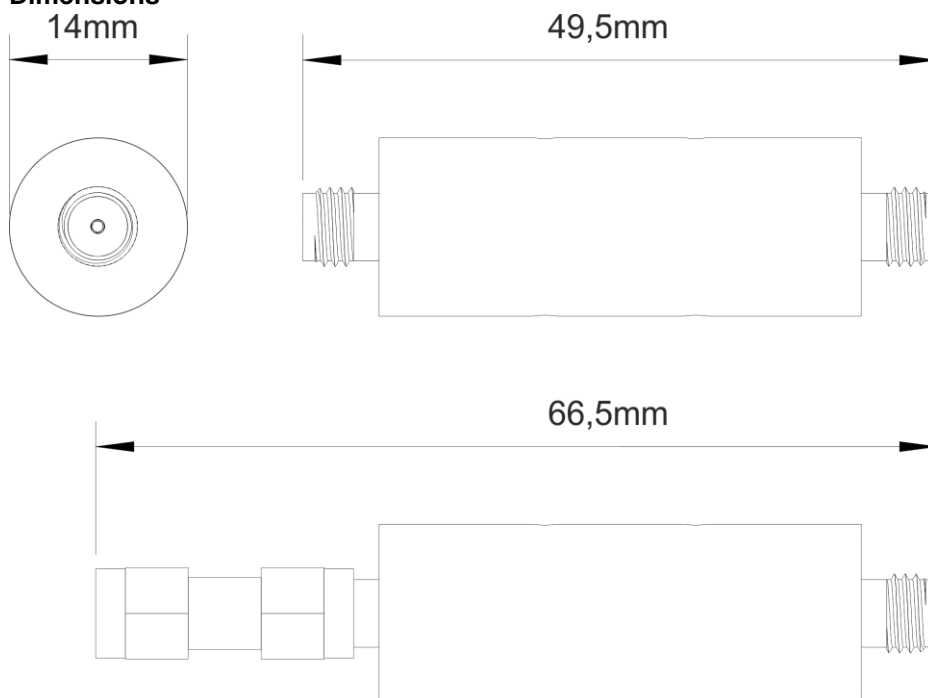
Individual Equalization

Further equalizer types are available on demand.

RF Specification

Parameter	Symbol	Min.	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 rd order intercept	$OIP3^1$	+46			dBm	$f < 1000$ MHz
	$OIP3^1$	+42	+44		dBm	$f > 1000$ MHz
maximum RF power	P_{RF}			+20	dBm	
maximum DC voltage	U_{DC}			20	V	
RF connectors		SMA female				
dimensions	W x D	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	P/N:	1407.5002.1		C-EQU1500HP15		
included accessories		adapter SMA/SMA male				

Note 1: tested at $P_{out} 2 \times +17$ dBm

S-Parameters (typical response)**Dimensions****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 kHz...4000 MHz	1807.6300.1
C-EQU1500HP5	RF Cable Equalizer with 5 dB loss compensation between FM and GNSS	1407.5001.1