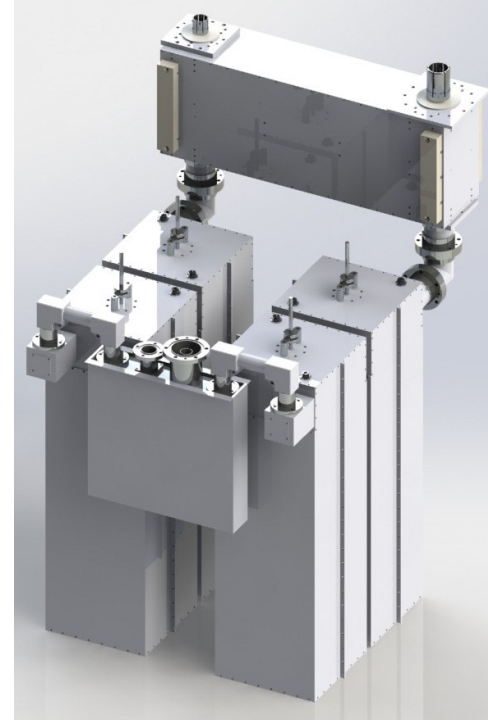


## MODEL FDDPDC5-CE

- COMBINER 2 CHANNEL
- DOUBLE BALANCED BRIDGE
- FM BAND 87.5-108 MHz
- BAND II

The double balanced bridge system consist of two band-pass filter, two -3dB coupler and a absorber. One of both inputs has a narrow-band characteristic (complying with the pass-band functions of the band pass filters), while the remaining input features a broadband characteristic within the operating frequency range of -3dB couplers, both inputs exhibits a frequency independent load impedance to the RF source.



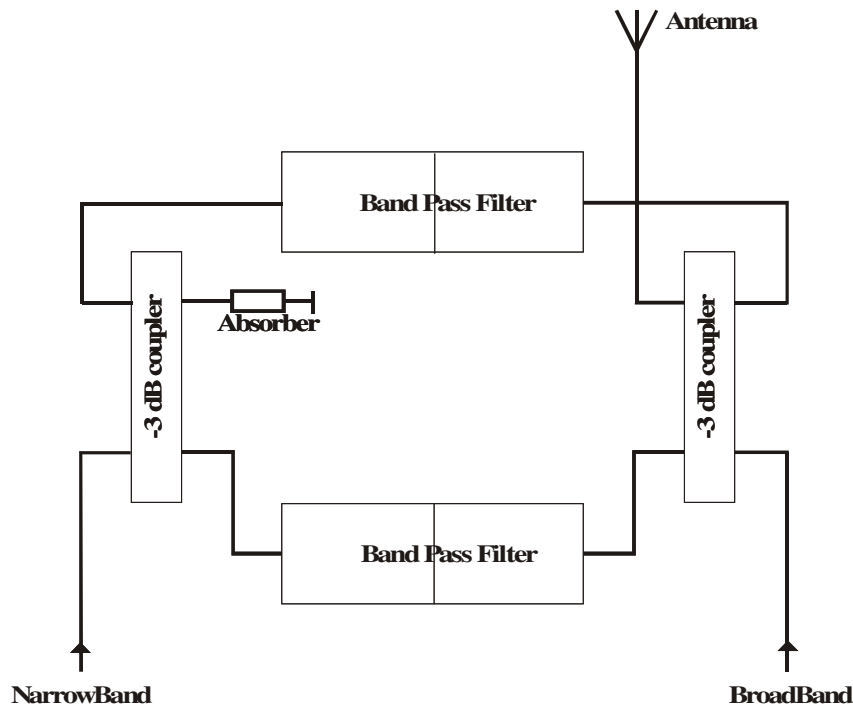
### TYPICAL SPECIFICATIONS

Model	FDDPDC5-CE – Double Bridge Type
Impedance	50 Ohm
Frequency Range	87.5-108 MHz
VSWR $\pm$ 150 KHz	1.1:1 max
Insertion Loss	at $f_0$ 0.25 dB Max (Narrow Band Input) 0.1 dB Max (Broad Band Input)
Return Loss $\pm$ 150 KHz	$\leq$ -26 dB
Isolation $\pm$ 1.5 MHz	N/B $\rightarrow$ B/B $\geq$ 30 dB B/B $\rightarrow$ N/B $\geq$ 40 dB
No. of Input	2 (NarrowBand + BroadBand)
No. of Output	1
Connectors	NarrowBand Input 1+5/8" Option 3+1/8" BroadBand Input 3+1/8" Option 4+1/2" Output 4+1/2" Option 6+1/2"
Max Power	10KW on NarrowBand Input 60KW on BroadBand Input
Working Temperature	-20°C $\div$ +50°C
Colour	Enamel Gray Ral 7001
Materials	Aluminum, Brass, Copper, PTFE, Stainless Steel, Silvering (min 12 $\mu$ m thickness)

### Features:

- Distortion – Free Transmission
- Frequency independent input impedance
- The frequency at the broadband input can be varied without retuning of the pass-band cavity filters.
- The broadband input can be used as spare input for expansion without requiring modification of the existing pass-band cavity filters
- Low loss, high isolation
- Natural convection
- If only narrow band input is being used, an extremely high coupling attenuation (directional coupler attenuation plus filter attenuation) can be achieved for very small frequency spacings.
- Low loss, high isolation
- Option: Group delay equaliser

## SCHEMATIC BLOCK



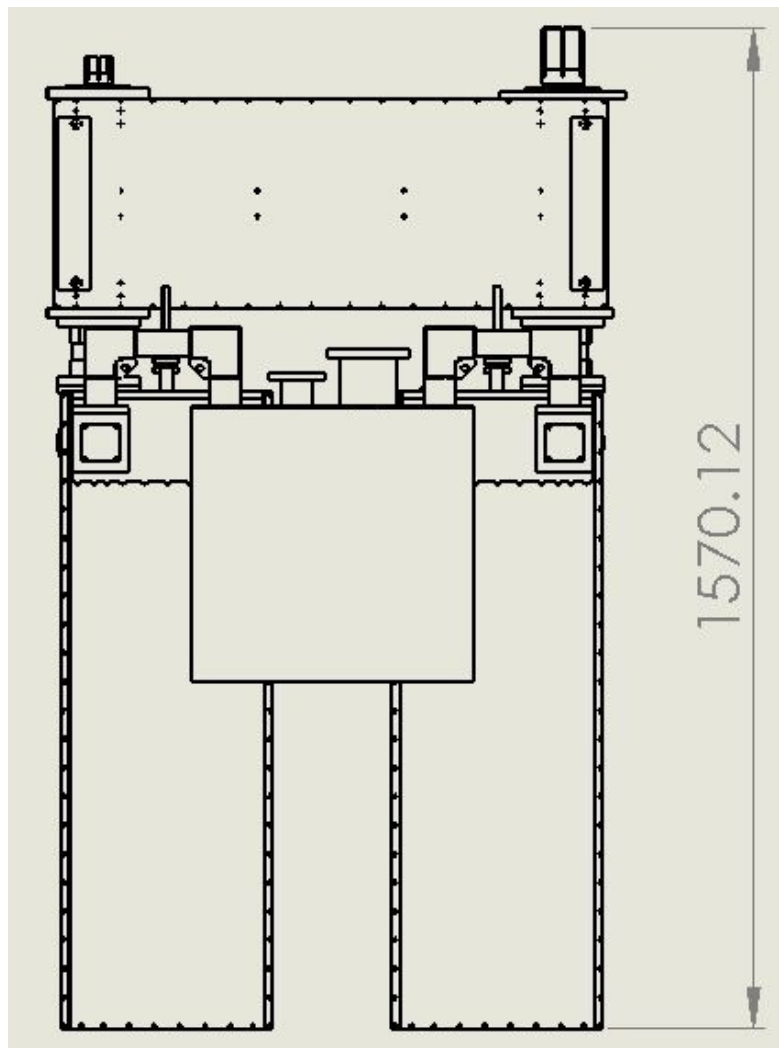
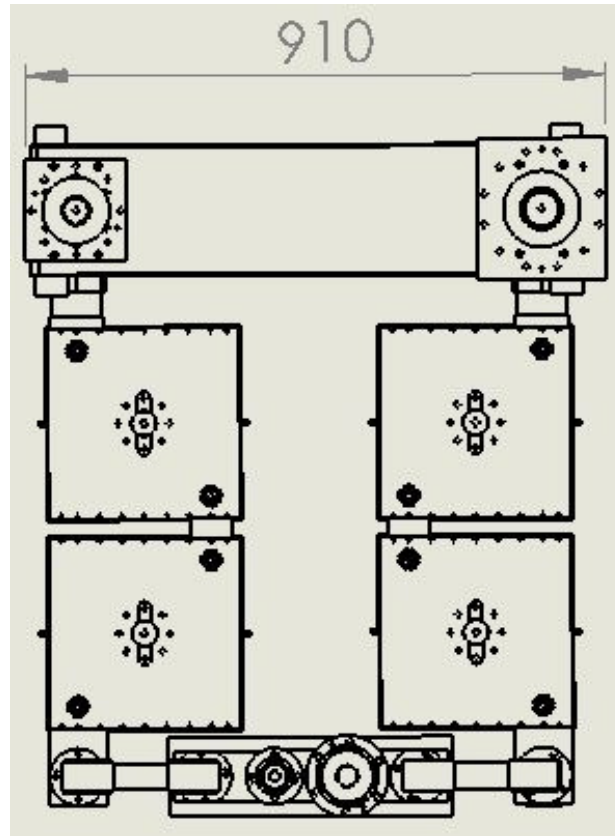
Schematic block of double bridge diplexer

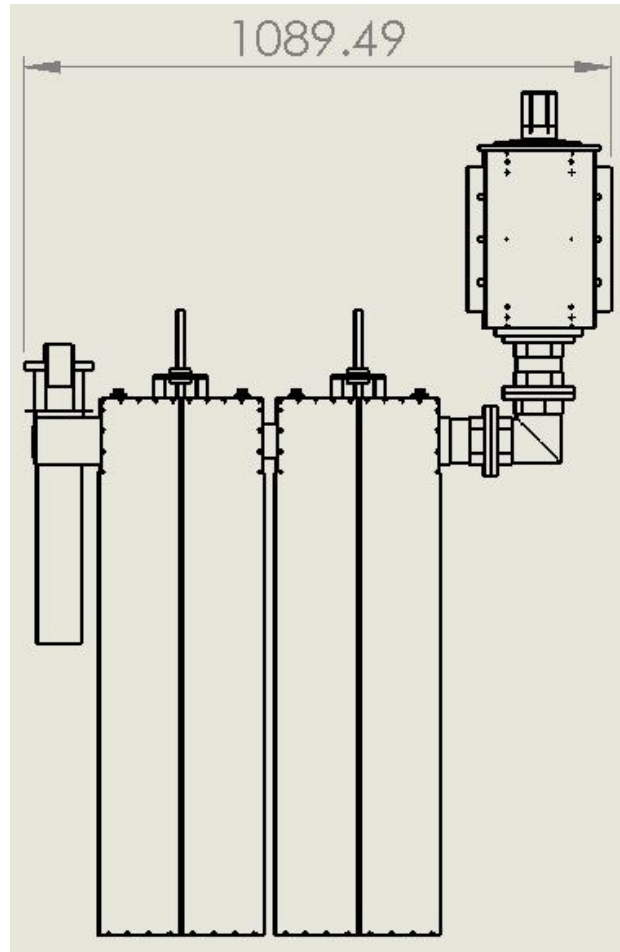
The double bridge filter is factory tuned. When ordering, please specify the desired operating channel for the narrow band input.

The broadband input accepts, however, any frequency range. The devices can also be tuned by the customer.

Detailed instructions and adjustment tools are supplied with each unit.

## DIMENSIONS





Dimensions	1570(Max size)×1090×910 mm (61.8(Max size)×42.9×35.8 inch) (H×L×W)
Net Weight	≅ 115 Kg

## VIEWS OF THE SYSTEM

