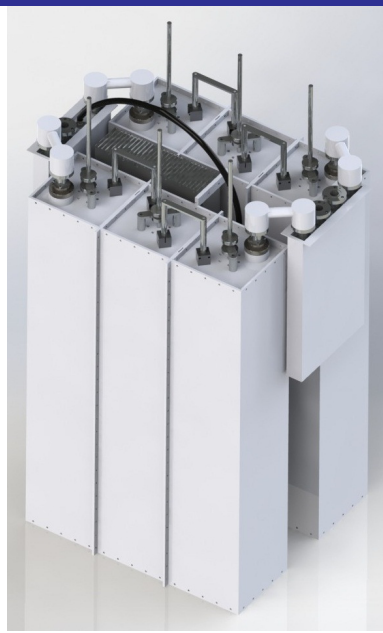
MODEL FDDPTC1



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

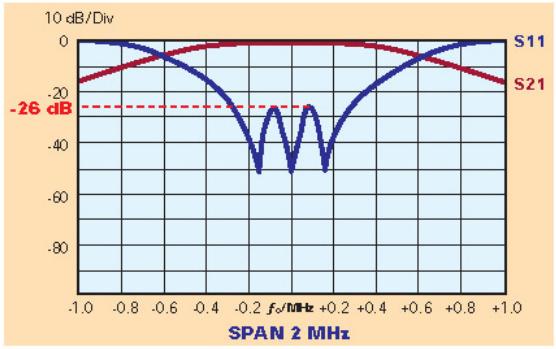
The Double Balanced Bridge System consists of two Band-Pass Filters, two -3dB Couplers and one Absorber. One of the inputs has a broadband characteristic (complying with the band-pass functions of the band-pass filters), while the other input has a narrow-band characteristic within the operating frequency range of -3dB couplers. Inputs exhibit a frequency independent load impedance to the RF source.

TYPICAL SPECIFICATIONS

Model	FDDPTC1 – Double Bridge Type
Impedance	50 Ohm
Frequency Range	87.5-108 MHz
VSWR ± 150 KHz	1.1:1 max
Insertion Loss	at f_0 0.3 - 0.4 dB Max Narrow Band Input at f_0 0.1 dB Max Broad Band Input
Return Loss ± 150 KHz	≤ -26 dB
Isolation ± 1 MHz	N/B → B/B ≥ 30 dB B/B → N/B ≥ 40 dB
Number of Inputs	2
Number of Outputs	1
Connectors	Input 7/8” Output 7/8”
Max Power	2000 W × 2 Channels
Working Temperature	-20°C ÷ +50°C
Colour	Enamel gray ral 7001
Materials	Aluminium, Brass, Copper, PTFE, Stainless Steel, Silvering (min 12µm thickness)

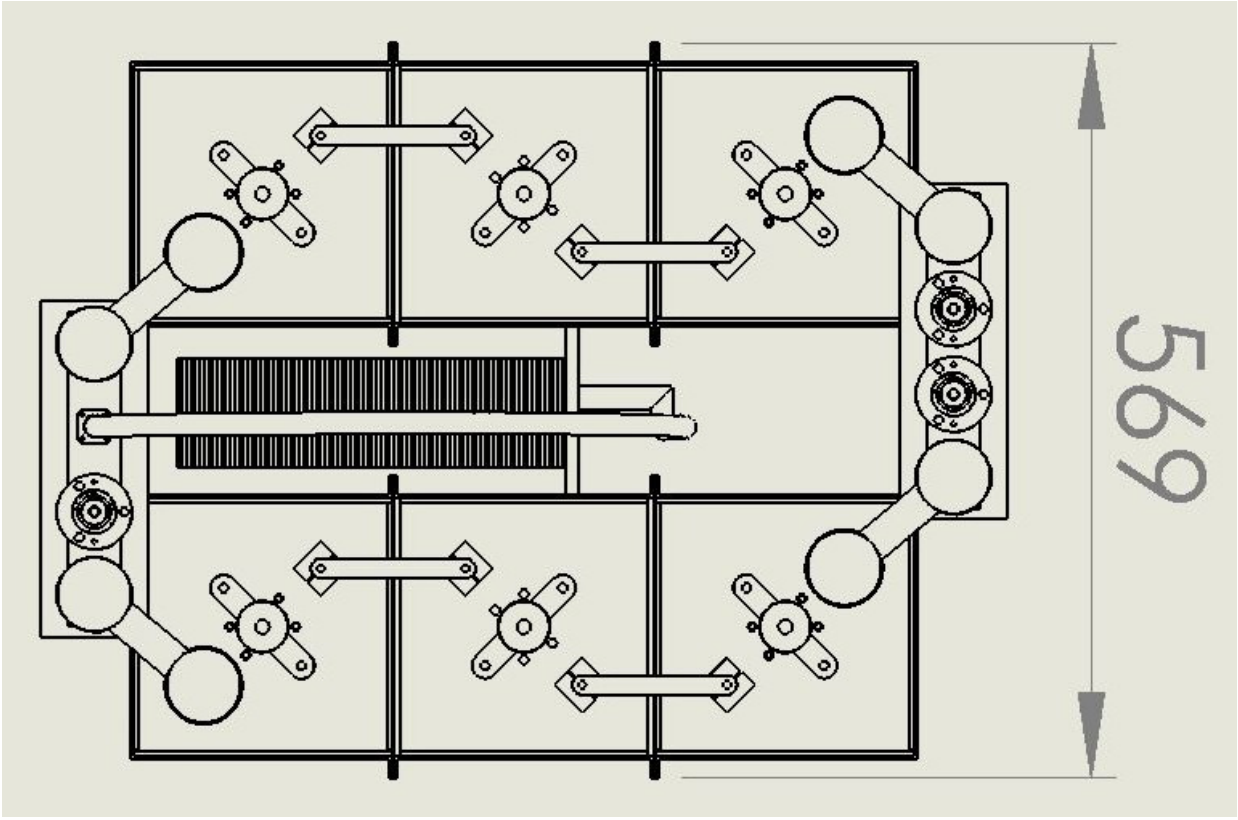
Features:

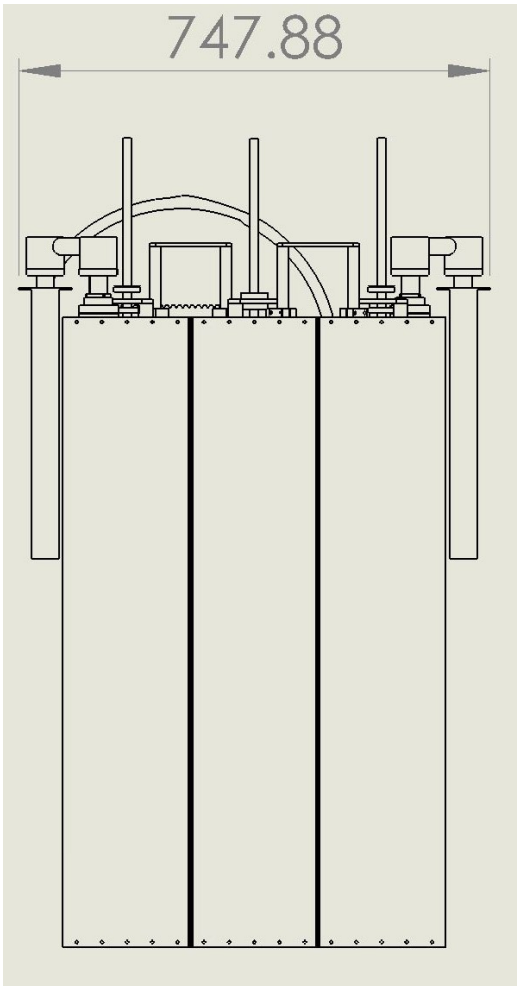
- Distortion – Free Transmission
- Double Balanced Bridge
- Frequency independent input impedance
- Low Loss, High Isolation
- Natural Convection
- Frequency at broadband input can be varied without retuning band-pass cavity filters
- Broadband input can be used as spare input for expansion without requiring modifications of the existing band-pass cavity filters
- If narrow band input is the only one being used, an extremely high coupling attenuation (directional coupler attenuation plus filter attenuation) can be achieved for very small frequency spacing

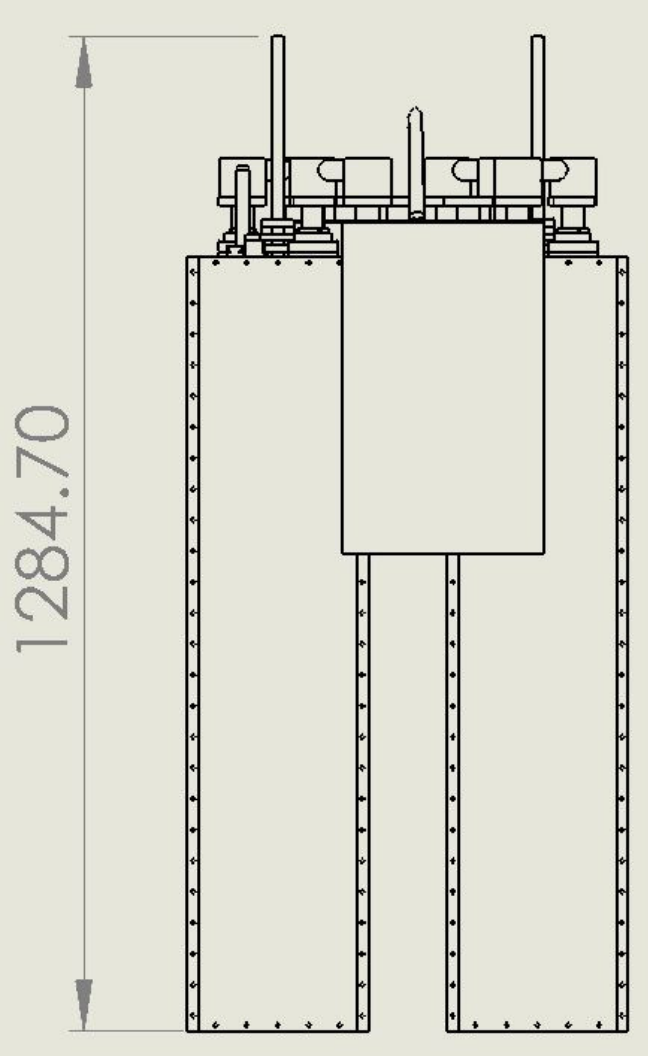


Typical shape of a curves for S11 and S12 parameters for single filter

DIMENSIONS







Dimensions	1400(Max size)×569×748mm (55.1(Max size)×22.4×29.4 inch) (H×L×W)
Net Weight	≅ 180 Kg

VIEWS OF THE SYSTEM