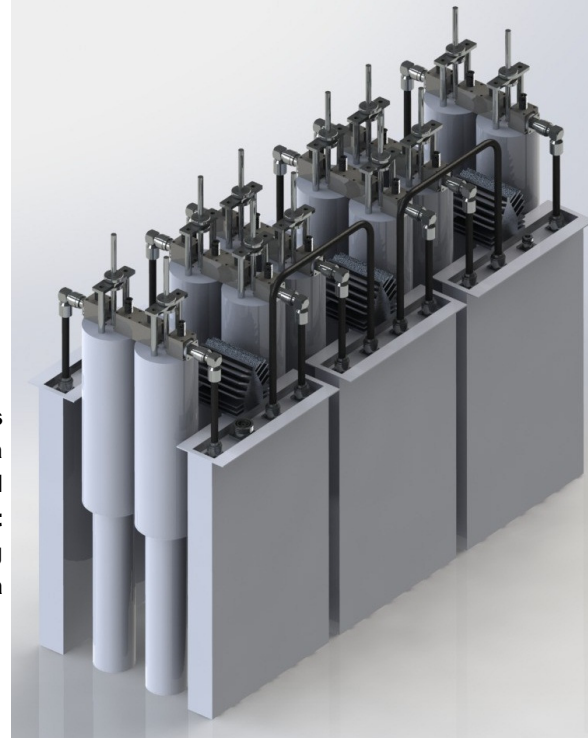


MODEL FQDPDC03

- COMBINER 4 CHANNEL
- DOUBLE BALANCED BRIDGE
- FM BAND 87.5-108 MHz
- BAND II
- RACK VERSION (OPTIONAL)

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 bandpass 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.



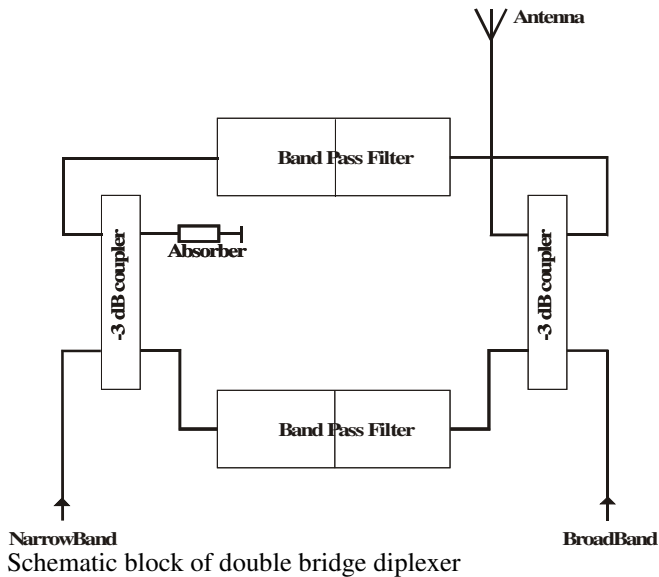
TYPICAL SPECIFICATIONS

Model	FQSDC03 – Type DOUBLE BRIDGE
Impedance	50 Ohm
Frequency Range	87.5-108 MHz
VSWR $\pm 150\text{Khz}$	1.1:1 max
Insertion Loss	at f_0 1.1 dB max (Narrow Band Input 1)
	at f_0 1.0 dB max (Narrow Band Input 2)
	at f_0 0.9 dB max (Narrow Band Input 3)
	0.3 dB Max (Broad Band Input)
Return Loss $\pm 150\text{Khz}$	≤ -26 dB
Isolation $\pm 2\text{MHz}$	≥ 30 dB
No. of Input	4 (3 NarrowBand + BroadBand)
No. of Output	1
Connectors	Input N female
	Output N or 7/16"
Max Power	150 W X 4 Channels
Working Temperature	$-20^\circ\text{C} \div +50^\circ\text{C}$
Colour	Silver
Materials	Aluminium, Silver bras, copper, PTFE, Stainless steel, silver plated (min 12 μ thickness)

Features:

- Distortion – Free Transmission
- Double Balanced Bridge system with double pass-band cavity filters
- Double Balanced Bridge system with triple pass-band cavity filters (standard configurations)
- Double Balanced Bridge system with pass stop
- Low loss, high isolation
- Natural convection
- Option: Group delay equaliser
- Frequency independent input impedance

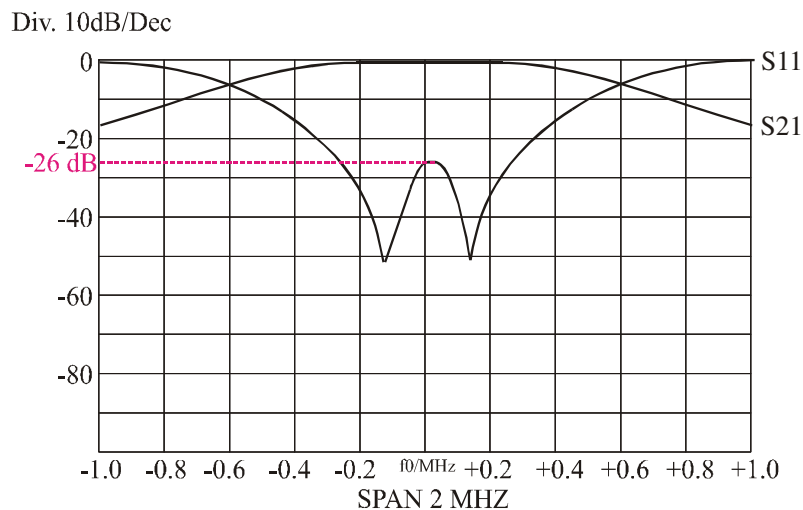
- The frequency at the broadband input can be varied without retuning of the pass-band cavity filters.
- The broadband input can be used as spare input for expansion without requiring modification of the existing pass-band cavity filters.
- If only narrow band input is being used, an extremely high coupling attenuation (directional coupler attenuation plus filter attenuation) can be achieved for very small frequency spacings.



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

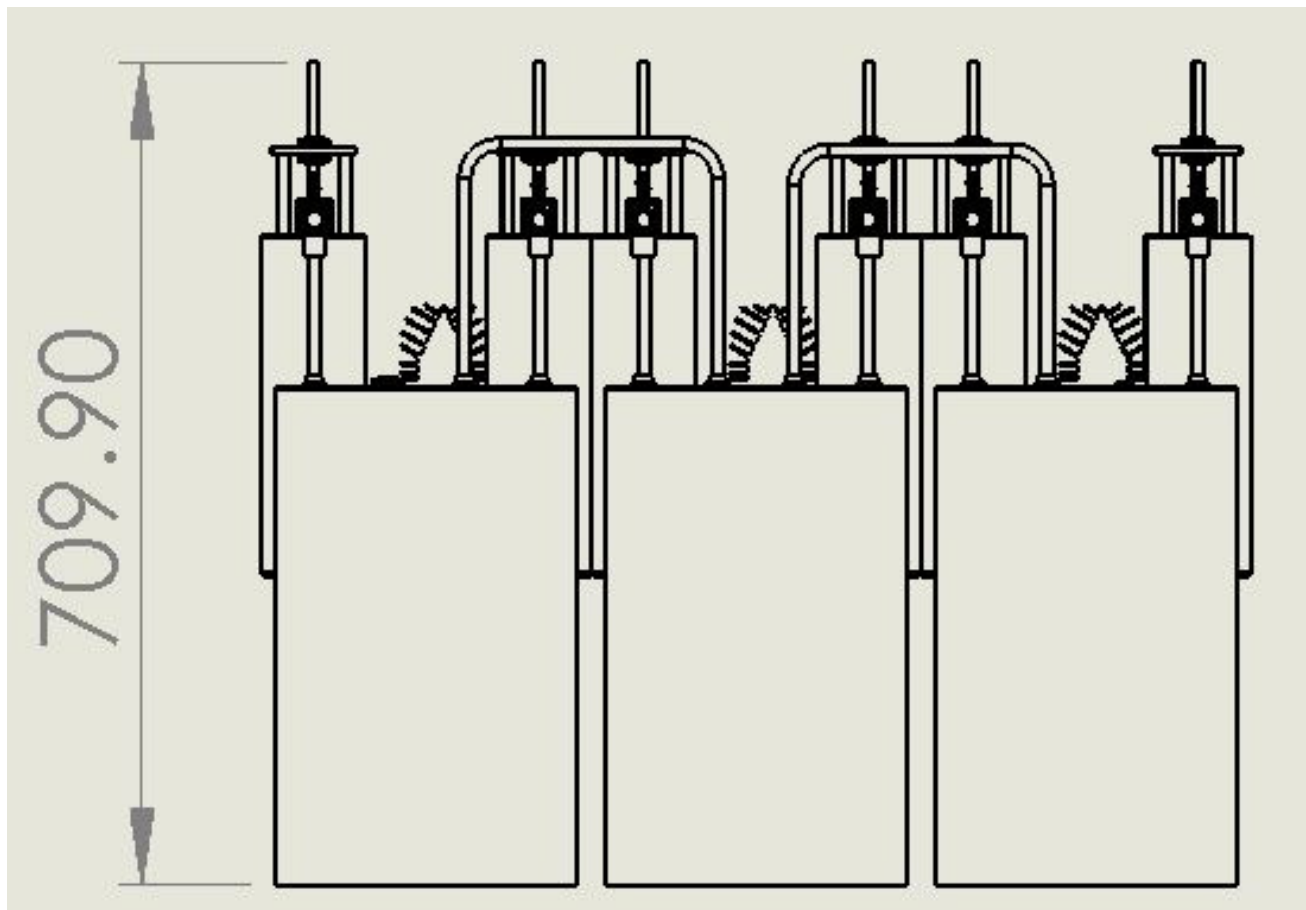
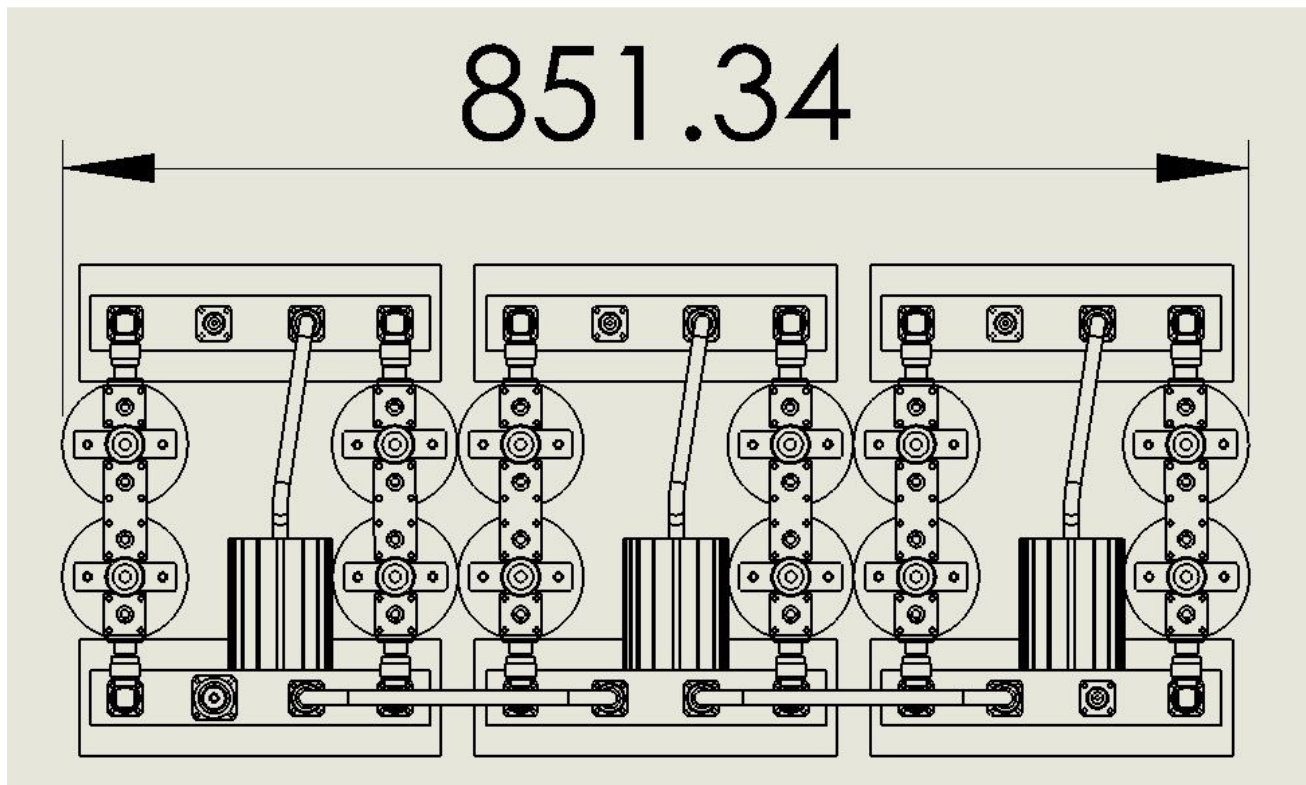
The broadband input accepts, however, any frequency range. The devices can also be tuned by the customer.

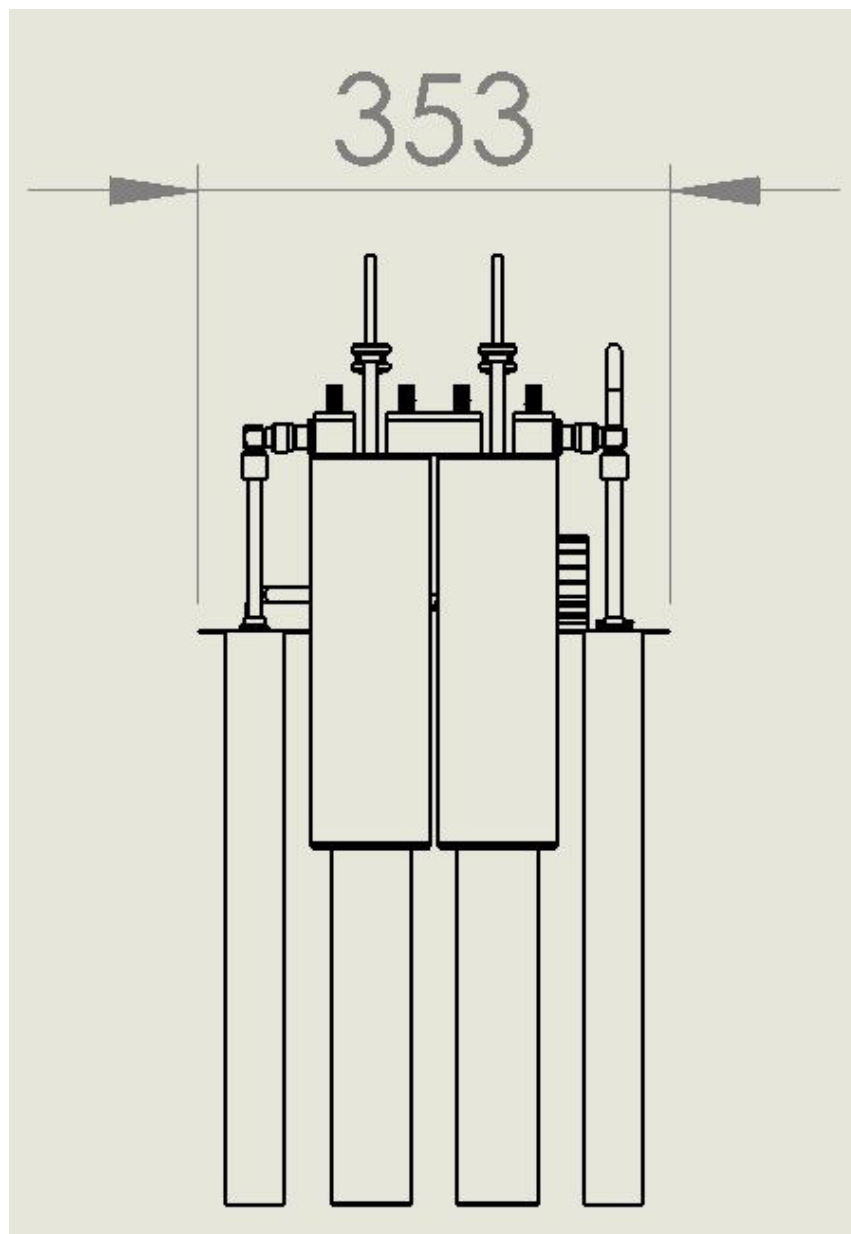
Detailed instructions and adjustment tools are supplied with each unit.



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

DIMENSIONS





Dimensions	710(Max size)×852×353mm (28.0(Max size)×33.5×13.8 inch) (H×L×W)
Net Weight	≅ 65 kg

Panel Size	24 HE (1 HE=44,45 mm)
Net Weight	≅ 66 Kg

VIEWS OF THE SYSTEM

