

Feeder Network for X/Ka-Band

**X/Ka-Band 4-Port Combiner Circular Polarization
at C- and Ka- Band**

Type: FSY-02-X/Ka-R-01a

	X- Band	Ka- Band
Frequency Range	7.25 GHz to 7.75 GHz	18.2 GHz to 22.0 GHz
Return Loss	≥ 16 dB	≥ 16 dB
Polarization	Dual RHCP/LHCP	Dual RHCP/LHCP
Insertion Loss	≤ 0.35 dB	≤ 0.3 dB
Waveguide size	R70 / WR 134	R220 / WR 42
Flanges Port 1 and Port 2	customized	
Flanges Port 3 and Port 4		customized
Common Port	Adapted to horn feeder	
Cross Polarization Isolation, circular	≥ 25 dB	
Cross Polarization Isolation, linear	≥ 35 dB	
Material	Brass and Aluminium	
Finish	White Paint (standard)	
Operating Temperature	-20° C to 40° C	
Operation Pressure	max. 10 kPa (100 mbar)	

Note: Suitable Dual-Band Feedhorn is suitable to illuminate Gregory 3.7 m Reflector System with $f/D = 0.37$ (for instance ASC Signal). Ask for other Reflector Systems, suitable Feed-horns can be supplied.

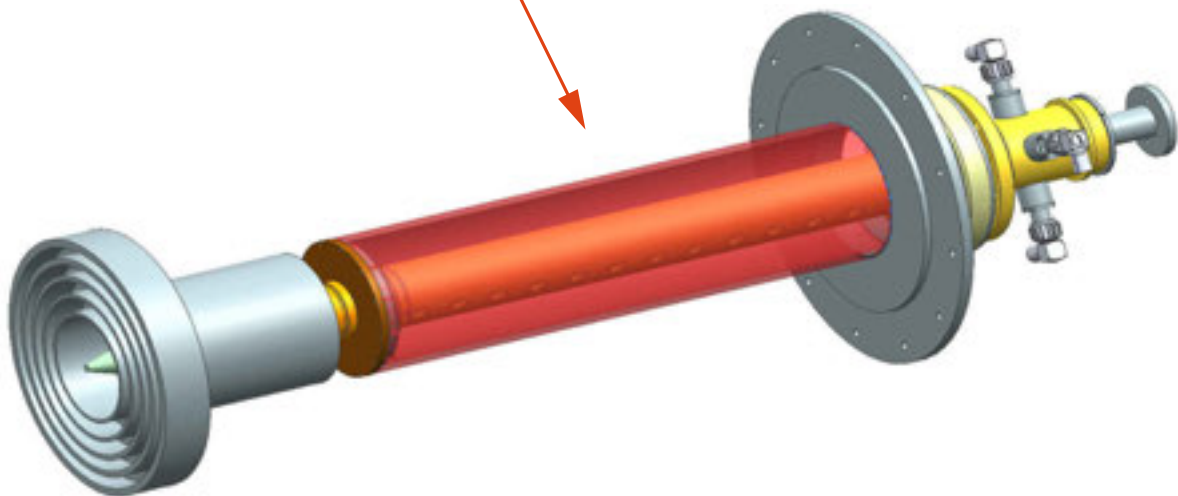
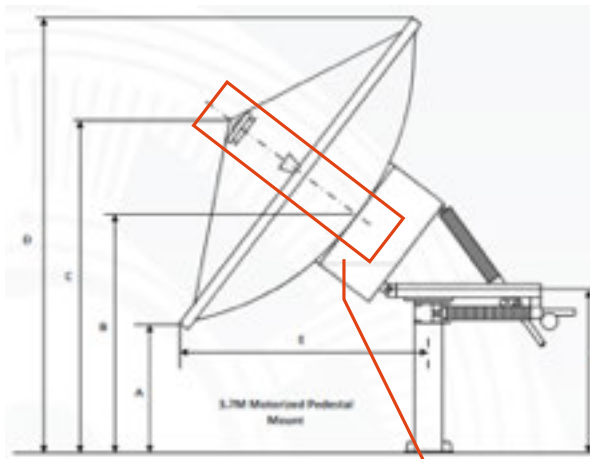
Combiner offers easy upgrade or modification of existing antennas to Dual-Band operation. As per customer's needs, the system can be switchable at both Bands.

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Electrical Performance of Antennas equipped with the X-/Ka- Band Combiner

			3.7 m Gregory Antenna ASC Signal
Antenna Gain referred to the Rx ports of the 4-Port Combiner	X- Band 7.25 GHz to 7.75 GHz	CP/LP	F = 7.500 GHz ≥ 47dBi
	Ka- Band 18.2 GHz to 22.0 GHz	CP/LP	F = 11.750 GHz ≥ 55,5 dBi

3.7 Meter ASC signal antenna



X-/ Ka- Band 4-Port Combiner (RX only) with Feedhorn for 3.7 m Gregory Antenna