

DATA SHEET



PHS Notch Filter

100-0386-01

- Passes 1710-1880 MHz with very low insertion loss
- 300W filter
- Minimum 70 dB of attenuation at frequencies of 1884.5 to 1915.85 MHz when cascaded with the Nokia RRU filter
- Available in a quad configuration
- AISG Modem and output port available

Overview

Communication Components, Inc. PHS Notch filter provides a very low insertion loss in the DCS Band (1710-1885). The filter provides a minimum of 70 dB of attenuation in the PHS Band when cascaded with the Nokia RRU filter.

The CCI Notch filter provides optimal performance for the passband with low insertion loss, low Intermodulation, and high power handling. Excellent return loss delivers the best match to the antennas and base station, saving precious transmit power. The Bandpass filter is the ideal solution for providing additional rejection at the DCS band edge. The CCI Notch filter enables full Remote Electrical Tilt (RET) control capability by providing an AISG Modem on port 1.

Technical Description:

The notch filter consists of multiple cavity resonators to achieve 70 dB of attenuation within 4.5 MHz of the pass band when cascaded with the Nokia RRU filter. Extensive temperature compensation is employed to insure frequency stability over the specified temperature range. The notch filter is configured with 4.3-10 female connectors, and is optionally available with integral 1/4 inch coax cables.

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Electrical			
Specification	Frequency	Value	
Pass Band Loss	1710-1785 MHz	< 0.2 dB	
	1805-1860 MHz	< 0.25 dB	
	1860-1880 MHz	0.6 dB average (< 2.0 ±0.3 dB @1880)	
Rejection Band*	1884.5-1915.85 MHz	70 dB	
Pass Band Return Loss	1710-1880 MHz	> 18 dB	
Isolation between Filters	1710-1880 MHz	> 40 dB	
Group Delay Distortion	1710-1785 MHz	10 nS Max	
	1805-1880 MHz	15 nS average (200 nS Max @1880)	
* When Cascaded with Nokia RRU Filter			
	50 ohms		
	300 W may		
Continuous Average Power			
Peak Power	S.U.RW Max.		
Intermodulation Performance	-110 dBm (-153 dBc) at 2 x +43 dBm tones		
Modem Option	9600 Baud per AISG 2.0/3GPP TS25.461		
Environmental			

Operating Temperature -40°C to +55°C Ingress Protection IP20 (Indoor)

Mechanical		
Moo	el Quad	
Connecto	rs $8 \times 4.3-10$ female (or optional integral 1/4 inch coax cables)	
Housing Dimensions (e	t) 349 x 201 x 66 mm (13.74 × 7.91 × 2.60 in.)	
Weight (e	t) 4.4 kg (9.7 lbs)	

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SPECIFICATIONS

PHS Notch Filter

100-0386-01



Indoor Passband Filter Outline Drawing 100-0386-01

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Parts & Accessories

100-0386-01 Quad Outdoor Notch filter with AISG Modem

Standards & Compliance

Certifications

Antenna Interface Standards Group (AISG), Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US, ISO 9001



