

CA911F3V11

TWIN DIPLEXER 3GSM850-GSM900

Kaelus rack mounted filter assemblies provide the ability to install commonly used filter configurations into a 19in rack making installation easy and minimizing rack space requirements. The CA911 combines part band 3GSM850 and part band GSM900 technologies into a single feeder in a simple twin package.



FEATURES

- Combines TX/RX of GSM900 and 3GSM850 BTS to one feeder
- Provides rejection of GSM900 frequencies for 3GSM850 downlink
- Main and diversity paths
- Provides rejection of 3GSM850 frequencies for GSM900 uplink
- Low passive IM performance
- 19in rack mounted, front or rear mounting

TECHNICAL SPECIFICATIONS

PORT NAME	MAIN (FA2 & FA3)	DIVERSITY (FA1 & FA2)
Passband 3GSM850 TX band	875 - 884.6MHz	879.8 - 889.6MHz
Passband 3GSM850 RX band	830 - 844.6MHz	830 - 844.6MHz
Passband GSM900 TX band	936.9 - 943.6MHz	936.9 - 943.6MHz
Passband GSM900 RX band	891.9 - 898.6MHz	891.9 - 898.6MHz

ELECTRICAL	
Impedance	50ohms
Insertion loss	2dB maximum (TX + RX band edge), 1dB typical (TX + RX mid-band) 1.2dB maximum across passband (variation)
Return loss	17dB minimum
Group delay variation	<200 ns
Maximum input power	GSM900 = 120W (average) / 500W (PEP) e.g. 4 x 30W GSM carriers 3GSM850 = 120W WCDMA (with 10dB crest factor)
Intermodulation products	<-155dBc for two tones at any frequency in either TX band at 20W CW each TX passband = <-97dBc for two tones at any frequency in either TX band at 20W CW each
Isolation – 3GSM850 to GSM900 band	40dB minimum
3GSM850 TX error vector magnitude (main)	<7.5% (on a WCDMA carrier with center frequency in the range 877.4-882.2MHz), 6% typical at 25°C
3GSM850 TX error vector magnitude (diversity)	<7.5% (on a WCDMA carrier with center frequency in the range 882.2-887.2MHz), 6% typical at 25°C

ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-0°C to +50°C +32°F to +122°F

MECHANICAL	
Dimensions H x D x W	440 x 306 x 72.3mm 17.32 x 12.05 x 2.84inch
Weight	15kg 33.1lbs
Connectors	DIN 7-16 (F) x6
Mounting	19inch rack mounting

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
CA911F3V11	Twin Diplexer 3GSM850-GSM900

MECHANICAL BLOCK DIAGRAM

