

Professional C-Band PLL LNB with integrated filters.



Swedish Microwaves C-Band PLL LNB has a unique design with integrated filters providing isolation from interfering signals (WiMAX etc.). This model is available either with internal high LO stability or with external 10 MHz reference. The Low Phase Noise is compliant to DVB-S2X standard.

Options include customized LO, customized gain, separate DC power input and separate input for the external 10 MHz reference.

Features

- Integrated filters
- Wide frequency range
- Low phase noise compliant to DVB-S2X
- High P1dB and IP3
- Internal or External 10 MHz reference
- Compact size and light weight
- High operating temperature range

TECHNICAL SPECIFICATIONS

MODEL:	C-PLL 5.15 S	C-PLL 5.15 E	C-PLL 5.75 W	C-PLL 5.75 U	C-PLL 5.95 U
Input freq. (GHz)	3.625–4.200	3.400–4.200	3.600–4.800	4.500–4.800	4.500–4.800
LO (GHz)	5.15	5.15	5.75	5.75	5.95
Output freq. (MHz)	950–1525 (inverted)	950–1750 (inverted)	950–2150 (inverted)	950–1250 (inverted)	1150–1450 (inverted)
Filtering (internal) Provides isolation from interfering signals.	>40 dB @ <3.2 GHz 15 dB @ 3.4 GHz 15 dB @ 4.4 GHz >40 dB @ >4.5 GHz	>40 dB @ <3.0 GHz 20 dB @ 3.2 GHz 15 dB @ 4.4 GHz >40 dB @ >4.5 GHz		>40 dB @ <3.2 GHz 15 dB @ 3.4 GHz 25 dB @ 5.0 GHz >40 dB @ >5.1 GHz	

Gain	60 dB typ. (55 dB min.) <i>Option customized gain and variation</i>				
Gain flatness	±0.4 dB max. within 30 MHz				
Gain flatness	±2 dB max. over band.	±3 dB max. over band		±2 dB max. over band	
Noise Temperature	50K typ.				
Phase Noise typ. (C-PLL 5.75 W)	-70 dBc @ 100 Hz	-80 dBc @ 1 kHz	-88 dBc @ 10 kHz	-95 dBc @ 100 kHz	-120 dBc @ >1MHz
	-70 dBc @ 100 Hz	-80 dBc @ 1 kHz	-83 dBc @ 10 kHz	-95 dBc @ 100 kHz	-120 dBc @ >1MHz
Image rejection	40 dB min.				
Output P1 dB typ.	+15 dBm				
Output IP3 typ.	+25 dBm				
Output VSWR	2.1:1 typ.				
Output connector	F-type 75Ω / N-type 50Ω / SMA-type 50Ω				
Input	CPR229G				
Input VSWR	2.3:1 typ.				
LO leakage	-60 dBm @ waveguide input				
Internal ref. stability	±0.5 ppm -20 to +70°C (±1 ppm -40 to +80°C) ±1 ppm -20 to +70°C (±1.5 ppm -40 to +80°C) ±2.5 ppm -40 to +80°C				
External 10 MHz ref	Level: -15 to + 5 dBm. Supplied through output connector <i>Option separate 10 MHz ref. input connector F-, N- or SMA-type</i>				
DC power	+12 to +18 V, 380 mA typ. Supplied through output connector <i>Option separate DC input connector F-, N- or SMA-type</i>				
Temperature range	-40 to +80°C				
Dimensions	142 x 99 x 70 mm (F- & SMA-connector)		148 x 99 x 70 mm (N-connector)		
Weight	380 g (F- & SMA-connector)		396 g (N-connector)		
Options	Customized LO, gain & variation, separate DC input, separate 10 MHz ref. input.				
Miscellaneous	Enclosed O-ring, screws, washers and nuts M6				

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