

Multiband (2-, 3- or 4-band)



Comes either with internal high LO stability or with external 10 MHz reference. 13/18 V and no tone/22 kHz are the standard switching.

Options include customized switching (e.g. 13/18/24 V), customized LO, customized gain, separate DC power input and separate input connector for the external 10 MHz reference.

All our LNBs are individually hand tuned to get the very best performance available for each unit. Quality and long term reliability is also essential. Therefore are all LNBs tested according to a very extensive test program, which includes heating, cooling, water-proof testing and rigorous electrical testing.

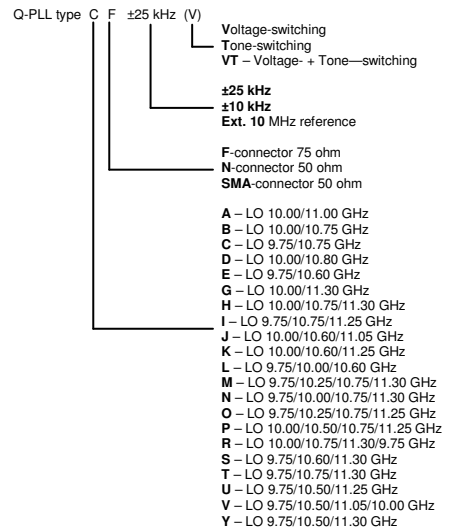
Swedish Microwave was founded 1986 and is today a leading manufacturer of professional LNBs (Low Noise Block converters). The company is located in Motala Sweden, and to date the products are installed in more than 100 countries.

All work is in-house allowing custom-design products, short delivery times, high flexibility, quick service and support.

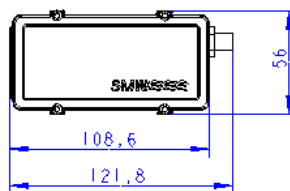
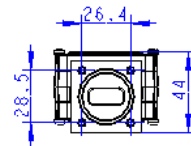
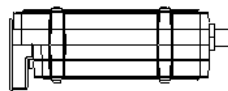
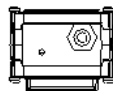
SPECIFICATION SMW Q-PLL LNB (Multiband)

Frequency range	10.70 - 12.75 GHz		
Standard LO frequencies (max. 4)	9.75, 10.0, 10.25, 10.5, 10.6, 10.7, 10.75, 10.8, 11.0, 11.05, 11.2, 11.25 and 11.3 GHz		
Standard IF Frequency	depend on the LO's (950-1450 MHz to 950-2150 MHz)		
LO stability (over temp. *)	Internal reference ±10 kHz* (±1 ppm) or ±25 kHz (±2.5 ppm)	LO stability	External reference Depend on the external reference
LO Phase noise typical	-75 dBc @ 1 kHz -78 dBc @ 10 kHz -90 dBc @ 100 kHz -120 dBc @ >1 MHz	External reference input frequency External reference input power External reference input port	10 MHz -5 to +10 dBm Output IF connector. Option via sep. connector (F, N or SMA) -70 dBc @ 10 Hz -70 dBc @ 100 Hz -75 dBc @ 1 kHz -78 dBc @ 10 kHz -90 dBc @ 100 kHz -120 dBc @ >1 MHz
Switching 2-band Voltage (V)	Band 1 11.5 - 14.0 V, No Tone Band 2 16.0 - 19.0 V, No Tone	LO Phase noise typical	
Switching 2-band Tone (T)	Band 1 No Tone, 11.5 - 20.0 V, Band 2 Tone 22 kHz, 11.5 - 20.0 V		
Switching 3-band Voltage (V) option 13/18/24 V (see below)	Band 1 11.5 - 13.7 V, No Tone Band 2 13.9 - 16.8 V, No Tone Band 3 17.0 - 19.0 V, No Tone	Switching 2-band Voltage (V)	Band 1 11.5 - 14.0 V, No Tone Band 2 16.0 - 19.0 V, No Tone
Switching 3-band Voltage (V) and Tone (T)	Band 1 11.5 - 14.0 V, No Tone Band 2 11.5 - 14.0 V, Tone 22 kHz Band 3 16.0 - 19.0 V, No Tone	Switching 2-band Tone (T) (ext. 10 MHz ref. via sep. input connector)	Band 1 No Tone, 11.5 - 20.0 V Band 2 Tone 22 kHz, 11.5 - 20.0 V
Switching 4-band Voltage (V) and Tone (T)	Band 1 11.5 - 14.0 V, No Tone Band 2 11.5 - 14.0 V, Tone 22 kHz Band 3 16.0 - 19.0 V, No Tone Band 4 16.0 - 19.0 V, Tone 22 kHz	Switching 3-band Voltage (V) Option 13/18/24 V (see Options)	Band 1 11.5 - 13.7 V, No Tone Band 2 13.9 - 16.8 V, No Tone Band 3 17.0 - 19.0 V, No Tone
		Switching 3-band Voltage (V) and Tone (T) (ext. 10 MHz ref. via sep. input connector)	Band 1 11.5 - 14.0 V, No Tone Band 2 11.5 - 14.0 V, Tone 22 kHz Band 3 16.0 - 19.0 V, No Tone
General		Switching 4-band Voltage (V) and Tone (T) (ext. 10 MHz ref. via sep. input connector)	Band 1 11.5 - 14.0 V, No Tone Band 2 11.5 - 14.0 V, Tone 22 kHz Band 3 16.0 - 19.0 V, No Tone Band 4 16.0 - 19.0 V, Tone 22 kHz
Gain typ.	58 dB typ. (53 dB min.)		
Gain variation within 30 MHz max.	±0.4 dB		
Gain variation max.	±4 dB		
Noise Figure, typical	0.8 dB		
LO radiation	-60 dBm		
Image rejection	40 dB min		
1 dB gain compression point typical	+15 dBm		
IP 3 typical	+25 dBm		
Input	WR-75 waveguide (R120)		
Output (waterproof)	F-connector 75 ohm, N-connector 50 ohm or SMA-connector 50 ohm		
Input VSWR	2.3:1 max		
Output VSWR	2.1:1 max		
Current	270 mA typ.		
Operating temperature	-40 to +80°C		
Storage temperature	-40 to +80°C		
Dimensions	122 (127 N) x 56 x 44 mm		
Weight	329 g (F- & SMA-connector) 345 g (N-connector)		
Specification Tone Switching			
Switching	No tone/22 kHz ±4 kHz		
Amplitude voltage	0.6 ±0.2 V		
Duty cycle	40-60%		
Options			
	Voltage switching 13/18/24 V (240/190/150 mA typ.)		
	Separate DC power input (F, N or SMA)		
	Customized gain and variation		
	Customized LOs		
	Extended frequency range		
	Separate input connector for the ext. 10 MHz ref.		
	SMA-input (via transition)		
Enclosed accessories			
	O-ring		
	Screw M4 x 8 4 pcs		

How to order Q-PLL Ku-band (if you can't find what you need please ask for a quote)



* ±25 kHz within -30° to +60°C
 ±10 kHz within -10° to +70°C



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