



# visiblewave<sup>®</sup> LNBs

## Introducing the VHK6 Hybrid LNB 6-output (2 x Wideband, 4 x Quad)

Finished in grey, supplied with Sky™ compatible bracket including built-in spirit level



Part No. VHK6



### Wideband Technical Specification

Input Frequency	10.7 ~ 12.75 GHz
Output Frequency	Vertical: 290 ~ 2340 MHz Horizontal: 290 ~ 2340 MHz
L.O. Frequencies	10.41 GHz
L.O. Stability	+/-0.5 MHz (max) @ Room Temp. +/-1 MHz (max) @ -40°C ~ +60°C
L.O. Phase Noise	-50dBc/Hz @ 1kHz (max.) -75dBc/Hz @ 10kHz (max.) -100dBc/Hz @ 100kHz (max.)
Noise Figure	0.1 dB (typ.)
Conversion Gain	50 dB (min) / 60 dB (max)
Gain Flatness @ 26MHz	+/-0.5dB (typ.)
Gain Variation	7dB (max.) @ full band
Cross Polar Isolation	25 dB (typ.)
Image Rejection	40 dB (min)
Current Consumption	0.85W (max.) (70mA @ +12V DC)
Power Voltage	9 - 19V DC
Connector Type	75Ω female F-connector
Output Spurious	<-60dBm
Operating Temp.	-40°C ~ +60°C
RED Compliance	EN 303 372-1

### Legacy Technical Specification

Input Frequency	low band: 10.7 ~ 11.7 GHz high band: 11.7 ~ 12.75 GHz	
Feedhorn - Linear	Optimised for offset dish	
Output Frequency Output 1, 2, 3, 4	low band: 950 ~ 1950 MHz high band: 1100 ~ 2150 MHz	
Output 1,2,3,4 VSWR (950 - 2150 MHz)	Ratio 2.0:1 (typ.), 2.5:1 (max.)	
L.O. Frequencies	9.75 / 10.6 GHz	
L.O. Stability	0.5 ~ 1.0 MHz	
L.O. Phase Noise	-55dBc/Hz @ 1kHz (max.) -75dBc/Hz @ 10kHz (max.) -90dBc/Hz @ 100kHz (max.)	
Conversion Gain	56 ~ 63 dB @ 25°C 54 ~ 60 dB @ -40°C ~ 60°C	
Gain Flatness Over Full Band	3 dB P-P (typ.), 5 dB P-P (typ.)	
Gain Flatness @ 26MHz @ 300MHz	+/- 0.5 dB P-P (typ.) +/- 4 dB P-P (typ.)	
1.7GHz	-50 dB (typ.) -47 dB (max.)	
Noise Figure	0.3 dB (typ.), 1.0 dB (max.)	
Cross Polar Isolation	18 dB (min.), 20 dB (typ.)	
Image Rejection	37 dB (min), 40 dB (typ.)	
Current Consumption	120mA (typ.), 140mA (max.)	
Operating Voltage & Band Switching	Vertical	11.5 - 14.5 VDC
	Horizontal	15.5 - 19 VDC
	Low-Band	0 KHz
	High-Band	18 - 26 KHz
Connector Type	75Ω female F-connector	
Operating Temp.	-40°C ~ +60°C	
RED Compliance	EN 303 372-1	