

iDirect ODU Electronics



The iDirect portfolio of advanced BUCs and LNBs is specifically tailored around the capabilities of iNFINITI® and Evolution® satellite routers, creating synergies that deliver increased flexibility, efficiency, and convenience through genuine innovations in ODU design and manufacturing.

Universal Design

BUCs feature standard plus extended Ku-band uplink range, covering 13.75 – 14.5 GHz contiguously. PLL LNBs can be used for all three Ku-band downlink sub-bands of Euro Low, Americas & Euro High (10.7 - 12.75 GHz), switched across two L-band ranges through DiSEqC (22KHz tone) control by an Evolution remote or user selected via a mechanical switch.

Power Efficiency

iDirect's ODU products are more power efficient than alternative products, which reduces power consumption and carbon emissions, as well as easing deployments of remotes supplied by solar and other restricted power sources.

Compact and Lightweight

Improved power efficiency results in smaller heat sinks to cool ODU electronics. iDirect's 3W Universal BUC occupies only a fraction of the volume of equivalent products and weighs just 350g. This results in less weight and wind-loading on antenna feed-arms and means that low-cost lightweight 'Class 1' antennas can be used with greater confidence.

Universal Ku-Band BUCs for iNFINITI® & Evolution®

iDirect's Universal Ku-band BUCs are compatible for use with both the iNFINITI and Evolution platforms.

	1.5W P/N E0001101-0001	3W P/N E0001100-0001	4W P/N E0001102-0001	
Output Frequency Range	13.75 to 14.5 GHz			
Input Frequency Range	950 to 1,700 MHz			
L.O. Frequency	12.80 GHz			
Output Power @ 1dB G.C.P.	+31.5 dBm min. @ +25 C, +31 dBm min. over temp.	+34.5 dBm min. @ +25C, +34 dBm min. over temp.	+36 dBm min. over temp.	
Power Consumption	15 W max. @ Pout = +31 dBm, +24 VDC (+15 to +30 VDC)	22 W max. @ Pout = +34 dBm, +24 VDC (+15 to +30 VDC)	37 W max. @ Pout = +36 dBm, +24 VDC (+15 to +30 VDC)	
Size and Weight	91.55 (L) x 68 (W) x 42.5 (H) mm 350g (0.77lb)		175.9 (L) x 143 (W) x 56.5 (H) mm 1.7Kg (3.75lb)	



1.5W Universal Ku-Band BUC

The 1.5W Universal Ku-band BUC is a low power, affordable solution. It is light-weight and has a small form factor.

• Part Number E0001101-0001

3W Universal Ku-Band BUC

The 3W Universal Ku-band BUC is more power efficient and ultra compact in design for ease of deployment.

• Part Number E0001100-0001



4W Universal Ku-Band BUC

The 4W Universal Ku-band BUC is ideal for networks requiring higher power and faster transmission speeds as well as in regions subject to heavy rain fade. The exceptionally low weight of the BUC, when paired with the appropriate LNB, conforms within the maximum weight limit of a Class 1 antenna.

• Part Number E0001102-0001

Universal Ku-Band PLL LNBs for Evolution®

iDirect's Universal Ku-band PLL LNBs are highly stable low-noise block converters with superior phase noise performance. Compatible for use with the Evolution platform.

	DiSEqC 22KHz P/N E0001110-0001	Manual Switch P/N E0001106-0001	
Input Frequency Range	10.70 to 11.70 GHz / 11.70 to 12.75 GHz		
Output Frequency Range	950 to 1,950 MHz / 1,100 to 2,150 MHz		
L.O. Frequency	9.75 GHz / 10.60 GHz		
Local Stability (Initial Setting Error & Over Temperature)	+/- 35 ppm max. Recommendations: X3/X5 to 1Msps min., e8350/e800 to 1.4Msps min.		
Power Consumption	145 mA typ., 170 mA max., +10 to +24 VDC		
Size and Weight	(L) 82.2 x (W) 40 x (H) 40 mm 210g (0.46lb)	(L) 83.2 x (W) 42 x (H) 42 mm 210g (0.46lb)	

DiSEqC 22KHz Universal Ku-Band PLL LNB

The DiSEqC 22KHz Universal Ku-band PLL LNB is highly stable and has superior phase noise performance.

• Part Number E0001110-0001



Manual Switch Universal Ku-Band PLL LNB

The Manual Switch Universal Ku-band PLL LNB is a premium quality low-noise block converter.

Part Number E0001106-0001

All Products Comply with the Following:

Health (Article 3.1a of the R&TTE Directive)

• Applied Standard(s): DIN, VDE 0848 Part 1 (2000-08), 1999/519/EC (1999-07) which refers to ICNIRP Guidelines, FCC OET Bullet No. 65, Edition 97-01, August 1997

Safety (Article 3.1a of the R&TTE Directive)

• Applied Standard(s): IEC/EN 60950-1: 2003

Electro Magnetic Compatibility (Article 3.1b of the R&TTE Directive)

• Applied Standard(s): EN 300 673, EN301 489-1, V1.2.1, EN 301 489-12 V1.1.1

Efficient use of the Radio Frequency Spectrum (Article 3.2 of the R&TTE Directive)

Applied Standard(s): ETSI EN 301 428 V1.3.1 (2006-02)

Standard Ku-Band DRO LNBs for iNFINITI®

iDirect's Standard Ku-Band DRO LNBs are low-cost, low-noise block converters for networks with medium to large outbound carriers using up to 8PSK. Suitable for use with iNFINITI satellite routers.

	European Low P/N E0001107-0001	Americas P/N E0001108-0001	European High P/N E0001109-0001
Input Frequency Range	10.95 to 11.70 GHz	11.70 to 12.20 GHz	12.25 to 12.75 GHz
Output Frequency Range	950 to 1,700 MHz	950 to 1,450 MHz	950 to 1,450 MHz
L.O. Frequency	10.00 GHz	10.75 GHz	11.30 GHz
Local Stability (Initial Setting Error & Over Temperature)	+/- 900 kHz max. Recommendations: iNFINITI Star networks to 750 Ksps min. (BPSK), 1256 Ksps min. (QPSK), 2048 Ksps min. (8PSK)		
Power Consumption	110 mA typ., 150 mA max., +12 to +24 VDC		
Size and Weight	(L) 82.2 x (W) 40 x (H) 40 mm 220g (0.48lb)		

European Low Standard Ku-Band DRO LNB

• Part Number E0001107-0001

Americas Standard Ku-Band DRO LNB

• Part Number E0001108-0001

European High Standard Ku-Band DRO LNB

Part Number E0001109-0001



Note: All products come with F-type IF connector + WR-75 with Groove RF waveguide, and include O-ring and qty $4 \times M4$ -type screws.

These products are made in Japan and carry a 3-year warranty.

About iDirect

iDirect, a world leader in satellite-based IP communications technology, transforms the way the world gets and stays connected. Our satellite-based IP communications technology enables constant communication for voice, video and data applications in diverse and challenging environments. These include:

- Supporting critical IP applications across the enterprise from VoIP and VPN, to streaming media
- Expanding cellular networks deep into rural and remote areas
- Providing back-up networks during network failure to assure business continuity
- Keeping emergency response teams in touch and in control
- Providing reliable, high-speed mobile broadband connectivity at sea or in the air that improves operations and crew welfare

We invite you to learn more about our product family at: idirect.net/Products

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