

iDIRECT BUC Series
6W Universal Ku-Band BUC (P/N: E0002603-0001)



The iDirect 6W Universal Ku-Band Block Up Converter (BUC) leverages the innovative design and advanced manufacturing processes used in iDirect's popular 3W product, extending compact size and power efficiency into the mid-power class. Supports both standard and extended Ku-band frequencies for ultimate flexibility and can be directly powered by iDirect X3 and above remotes.

Electrical Specifications

Output Frequency Range	13.75 to 14.5 GHz
Input Frequency Range	950 to 1,700 MHz
Conversion Type	Single, fixed L.O.
L.O. Frequency	12.80 GHz
Operating Power @ 1dB GCP	+37.8 dBm min. over temperature range
Linear Gain	62 dB nom., 56 dB min.
Input Impedance	75 Ω nom.
Input V.S.W.R.	2 : 1 max.
Output V.S.W.R.	1.3 : 1 max. for load V.S.W.R. (recommended)
DC Power Requirement [Voltage Range]	+24 VDC (+12 to +30 VDC)
[Power Consumption]	40 W typical, 48 W max. @ Pout = +37.8 dBm 35 W typical @ no IF 3 W max. @ ref. off (mute)
LED Indicator	GREEN: L.O. locked RED: L.O. unlocked (or no 10 MHz reference signal)

Mechanical Specifications

Input Interface	F-Type, Female
Output Interface	Waveguide, WR-75 (with Groove)
Dimension & Housing	174.9 (L) x 84 (W) x 59.2 (H) mm 6.89" (L) x 3.31" (W) x 2.33" (H)
Weight	1.2 kg (2.6 lbs) max.

Environmental Specifications

Temperature Range (ambient)	-40 to +60°C (operating) -40 to +75°C (storage)
Humidity	0 to 100% Rh (assumes hermetically-sealed OMT and Feed Horn)
Altitude	4572 m (15,000 feet)
Ingress Protection Rating	IP67 (dust tight and immersion up to 1 m, conditional on connection with waveguide)
Compliance	CE, FCC, RoHS

Compatible with Evolution and Velocity. This product is manufactured in Japan and carries a 3-year warranty.

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Mechanical Drawing

