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.

 $\begin{array}{c|c} \textbf{Input Impedance} & 75~\Omega~\text{nom.} \\ \\ \textbf{Input V.S.W.R.} & 2:1~\text{max.} \end{array}$

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.



Mechanical Drawing

