

# L To KU Band High Power BUC 8 - 125W



## Satellite Communications

This series of highly reliable High Power Block Up-Converters are designed for use primarily in VSAT applications. Input IF band is 950 MHz to 1450 MHz. The output RF frequency band of the system is in standard Ku-Band from 14 to 14.5GHz. Other frequency ranges are also available to customer specification. These units include an L-Band Up-converter powered by 24 VDC along with L-Band input and 10 MHz reference (all in 1 cable) as well as a high power Booster (AC or DC supply, Monitor and Control Interface is customizable).



This line of superior products engineered using state of the art technologies, offers High Powered BUC's characterized by unparalleled durability and dependability. Their unique design is key in providing the customer with a high quality, cost efficient solution for the VSAT Market.

### Key Features:

- **(14.0 - 14.5GHz) (13.75 - 14.25GHz) other options available**
- **Can be provided with 10MHz and/or 24VDC option**
- **Redundancy option for 1:1 configuration available for all power levels**
- **RS-485,RS232,RS422 or Analog M&C interface**
- **High thermal dissipation efficiency resulting in "Best in Class" MTBF**
- **Summary Alarm**
- **Over temperature shutdown**
- **RF power detection**
- **Mute control**
- **RF Monitor**

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Electrical Characteristics	Specification (typical)
Input Frequency range - IF	950 – 1450 MHz
Output Frequency range - RF	14.0 - 14.5GHz (13.75 - 14.25 GHz optional)
System Gain	70 dB nom.
Gain flatness over full band	+/-2 dB nom
Gain variation	± 2.5 dB over operating temperature range
Input/Output Return Loss	18 dB min.
Spurious at rated power	-50dBc max.
Third order IMD(two equal tones 5Mhz apart)	-24dBc max. @ 3dB back off (SCL 6 dB back off from P1dB)
<b>Phase Noise</b>	
@ 300 Hz offset	-60 dBc/Hz
@ 1 kHz offset	-70dBc/Hz
@ 10 kHz offset	-80dBc/Hz
@ 100 kHz offset	-90dBc/Hz
@ 1 MHz offset	-100dBc/Hz
Supply Voltage for BUC:	24 VDC & 10MHz (other options available)
For Booster:	110/220 VAC (47-63 HZ) Auto Ranging (48VDC optional)
<b>Mechanical Characteristics</b>	
<b>Interfaces</b>	
RF input	Type N(F) , (F-Type Optional)
RF output	WR75 (other options available)
M&C – Analogue or RS-485	MS3112E16-26P (other options available)
Power	MS3102R16-10P (other options available)
Operating Temperature	-40° C to +55°C
Storage	-55°C to +85°C
Humidity	100%, considering, rain 2" per hour
Altitude	10000' AMSL

Model	Output Power @ P1dB min (Watts/dBm)	Weight (KG / LBS)	Dimensions (inches)	Power Consumption For Booster (Watts)
WTX-14014539-70-ES-XX	8/39	7/15	12"x10"x8"	120
WTX-14014540-70-ES-XX	10/40	7/15	12"x10"x8"	150
WTX-14014541-70-ES-XX	12/41	7/15	12"x10"x8"	170
WTX-14014542-70-ES-XX	16/42	9/20	13"x12"x8"	250
WTX-14014543-70-ES-XX	20/43	9/20	13"x12"x8"	300
WTX-14014544-70-ES-XX	25/44	9/20	13"x12"x8"	400
WTX-14014545-70-ES-XX	30/45	9/20	13"x12"x8"	500
WTX-14014546-70-ES-XX	40/46	15/33	16"x13"x8"	600
WTX-14014547-70-ES-XX	50/47	15/33	16"x13"x8"	700
WTX-14014549-75-ES-XX	80/49	25/55	30"x20"x12"	1000
WTX-14014550-75-ES-XX	100/50	25/55	30"x20"x12"	1200
WTX-14014551-75-ES-XX	125/51	25/55	30"x20"x12"	1300