WAVESAT
WIRELESS / SANS FIL INC.

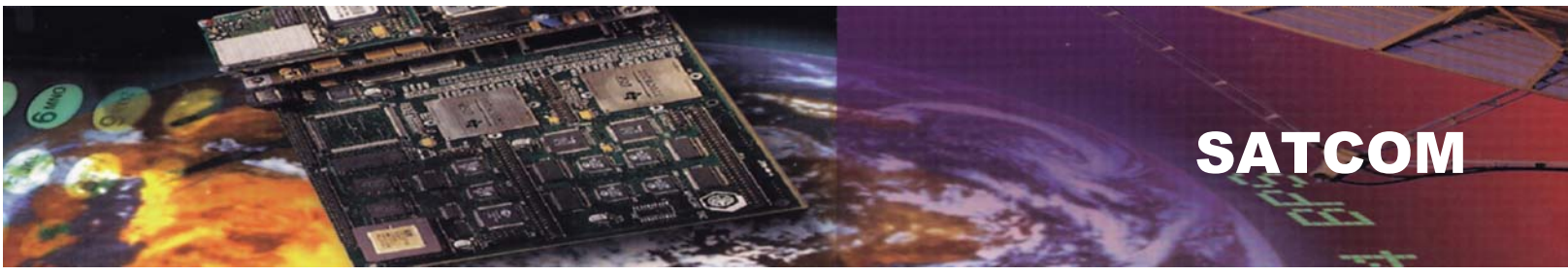
L TO C BAND HIGH POWER BUC'S

This series of highly reliable Block Up-Converters are designed for use primarily in VSAT applications. Input IF band is 950 MHz to 1525 MHz. The output RF frequency band of the system is in standard C-Band from 5.85 to 6.425GHz. 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 customisable). This line of superior products engineered using state of the art technologies offers High Powered BUC's characterised 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.

Features and Options

- AC or DC power supply (Booster only)
- High Power Efficiency
- Monitor and Control interface is customisable according to requirements
- Innovative mechanical design:
  Light and compact
  Protective shell configuration
  High thermal dissipation efficiency resulting in "Best in Class" MTBF
- System is easy to upgrade to any output power level
- Standard Mounting Kit for all output power levels
- Summary alarm
- Over-temperature shutdown
- RF power detection
- Mute control
- RS-485, RS232, RS422 or Analogue M&C Interface Options
- Redundancy option for 1:1 configuration is available for all power levels.

Building Solutions for a Wireless World



ISO 9002

MODEL	OUTPUT POWER at P1dB min (WATTS/dBm)	WEIGHT KG/LBS	SIZE INCHES	POWER CONSUMPTION FOR BOOSTER (WATTS)
WTX-596443-70-ES-00	20 / 43	5/12	14”x8”x11”	150
WTX-596446-70-ES-00	40 / 46	5/12	14”x8”x11”	250
WTX-596447-70-ES-00	50 / 47	9/20	30”x8”x12”	400
WTX-596448-70-ES-00	60 / 48	9/20	30”x8”x12”	450
WTX-596449-70-ES-00	80 / 49	9/20	30”x8”x12”	500
WTX-596450-70-ES-00	100 / 50	9/20	13”x12”x8”	600
WTX-596451-70-ES-00	125 / 51	20/44	19”x10”x12”	750
WTX-596452-70-ES-00	150 / 51.8	20/44	19”x10”x12”	900
WTX-596453-70-ES-00	200 / 53	26/57	22”x18”x15”	1100
WTX-596454-70-ES-00	250 / 54	26/57	22”x18”x15”	1200

ELECTRICAL CHARACTERISTICS	TECHNICAL SPECIFICATIONS
Input Frequency range - **IF**	950 – 1525MHz
Output Frequency range - **RF**	5.85 – 6.425 GHz (other options are available)
System Gain	70 dB nom.
Gain flatness over full band	+/-2 dB nom
Gain variation	± 1.5 dB over operating temperature range
Output Return Loss	18 dB min.
Spurious at rated power	-50dBc max.
Third order IMD(two equal tones 5Mhz apart)	-26dBc max. @ 3dB back off (SCL 6 dB back off from P1dB)
Phase Noise : at 300 Hz offset at 1 kHz offset at 10 kHz offset at 100 kHz offset at 1 MHz offset	-60 dBc/Hz -70 dBc/Hz -80 dBc/Hz -90 dBc/Hz -100 dBc/Hz

POWER REQUIREMENTS	
Supply Voltage for BUC: For Booster:	24 VDC 110/220 VAC (47-63 HZ) Auto Ranging (48VDC optional)

MECHANICAL CHARACTERISTICS		
Interfaces	IF input	Type N(F) (type F optional)
	RF output	CPR137 (other options available)
	M&C – Serial or Analogue	MS3112E16-26P (other options available)
	Power	MS3102R16-10P (other options available)

ENVIRONMENTAL CONDITIONS		
Temperature	Operating	-40° C to +60°C
	Storage	-55°C to +85°C
	Humidity	100%, considering, rain 2" per hour
	Altitude	10000' AMSL

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