

## C-BAND UP-CONVERTER 02 (5.850 - 6.425GHz)

The C-Band Up-converter is available in 19" wide and 1U high rack mountable systems. It offers frequency step size of 125kHz, with input frequency of 52 to 88MHz and output frequency between 5.850 - 6.425GHz. It is easily controlled and monitored remotely, using TCP/IP interface and has capability of allocating a unique IP address. The system could be easily controlled with standard software programs such as Labview, Labwindows, C, C++ etc.

- ### FEATURES
- Wideband output from 5.850 - 6.425 GHz
  - Output protected with a Isolator for open and short
  - High stability, low ripple and excellent phase noise
  - 10MHz External Reference option fitted as standard with automatic internal reference back-up
  - LCD LED alarms on front panel for control and monitoring
  - Input frequency 52MHz - 88MHz
  - Remote monitoring and control using TCP/IP interface
  - Internal capability of allocating unique IP address
  - Option to preset up to 20 Frequency channels
  - Sturdy 19" rack mountable case

- ### APPLICATION
- Satellite Communication
  - Weather Radar
  - ATE signal source
  - Civil Aviation Radar
  - Defense application

### Electrical Specification:

Parameter	Specification	Units
Frequency range	5.850 - 6.425	GHz
Gain	>30	dB
Gain adjust	30 dB in steps of 0.5 dB or smaller	dB
Gain stability	±0.25	dB/day
Gain ripple over 36MHz band	±0.2	dB
AM/PM conversion	0.1	Deg./dB
Noise figure	<6	dB
Frequency band	52 to 88	MHz
Return loss min.	19	dB
I/P level range	-30 to +10	dBm
Phase Noise	-70 dBc/Hz @ 100Hz -80 dBc/Hz @ 1KHz -100 dBc/Hz @ 1MHz	
Frequency step size (minimum)	125	KHz
Stability time min.	± 1x10 <sup>-9</sup>	/day
Stability temperature min.	± 1x10 <sup>-8</sup>	/day
Mean Time Between Failure (MTBF)	50,000	Hours



## C-BAND UP-CONVERTER 02 (5.850 - 6.425GHz)

### Physical Specification:

RF Output connector	N-Type	
Output impedance	50Ω	
Input Intermediate Frequency	52 - 88MHz	
Impedance	50Ω	
External reference	10MHz	
External Reference Connector	BNC/TNC/SMA	
Dimension	Width	19 inch
	Height	1U
	Depth	<250 mm.
Weight	<5kg	

### System Control:

Local Control	Front Panel push buttons and LCD display	
Remote Control	TCP/IP	RJ45 Ethernet Port
	RS232	9 pin D-type Female
Front Panel Alarms	Power On	LED
	Error	LED
	Remote Operation	LED
Operational Modes	Front Panel or remote is selected automatically	
IP Address allocation	Using telnet with Raw TCP/IP connection	

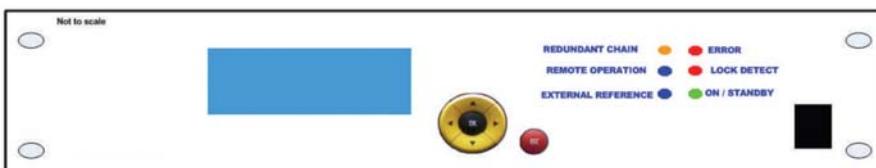
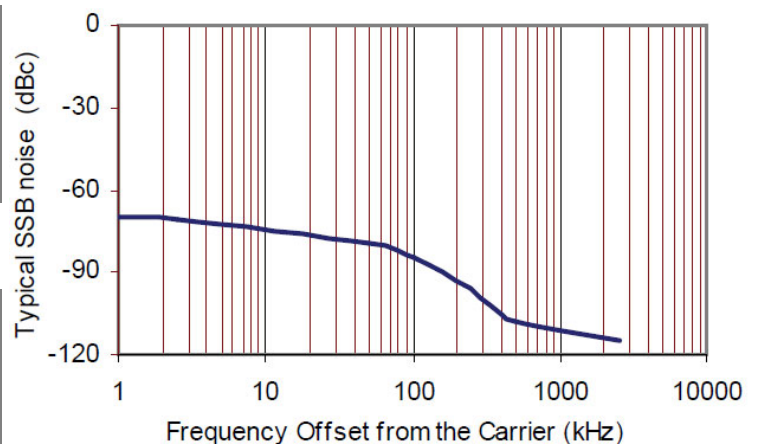
### Environmental Specification:

Operating temperature range	0 to 50°C
Location	Indoor use only
Humidity	-85% non-condensing
Storage temperature	-20 to +75°C

### AC power:

Voltage	85 - 264V AC
Frequency	50 - 60 Hz
Socket	IEC Standard
Fuses	5x20mm standard

Typical Phase Noise added by the system



### Other options available:

- Higher P1 dB point available
- Up to 5 hrs of battery backup option available
- SMA/TNC input/output connector available
- External reference could be set to 5MHz instead of 10MHz

Data sheet is for information purposes only and may be subject to modifications or may be discontinued without notice. *Rev. 1 dated 02-01-2015*