

C-BAND DOWN-CONVERTER

The C-Band Down-converter is available in 19" wide and 1U high rack mountable systems. It offers frequency step size of 1kHz, with output frequency of 70MHz and input frequency between 3.4 - 4.2 GHz. 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 remotely with standard software such as Labview, Labwindows, C, C++ etc.

- ### FEATURES
- Wideband input
 - input protected with a Isolator for open and short
 - High stability, low ripple and excellent phase noise
 - 10MHz External Reference option fitted as stand-ard with automatic internal reference back-up
 - LCD LED alarms on front panel for control and monitoring Output frequency 70 MHz \pm 20MHz
 - Option to preset up to 20 Frequency channels

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

Electrical Specification:

Parameter	Specification	Units
Frequency range	3.4 - 4.2	GHz
Gain	>25	dB
Power output P1 dB	> +46	dBm
Gain flatness over frequency @ Rated power	< \pm 3	dB
VSWR input	< 1.3 : 1	—
VSWR output @ Rated power	< 1.3 : 1	—
Noise figure, typical	< 6	dB
Harmonics (at rated output)	< -50	dBc
Spurious (at rated output)	< -60	dBc
Operating temperature range (typical)	0 to +50	$^{\circ}$ C
Mean Time Between Failure (MTBF)	50,000	hours



C-BAND DOWN-CONVERTER

Physical Specification:

Input & Output connector		N-Type
Input impedance		50Ω
Output Intermediate Frequency		70MHz
Output 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

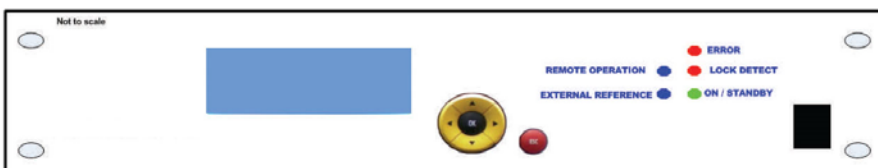
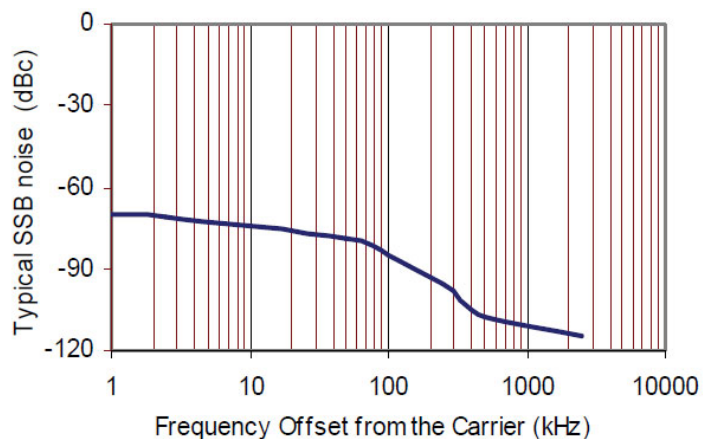
Environmental Specification:

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**