

C-BAND DOWN-CONVERTER 02 (3.625 - 4.20GHz)

This 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 52 - 88 MHz and input frequency between 3.625 - 4.200 GHz. It is easily controlled and monitored remotely, using TCP/IP interface and has capability of allocating a unique IP address. The system can be easily controlled with standard software programs such as Labview, Labwindows, C, C++ etc.

FEATURES

- Wideband input from 3.625– 4.200 GHz
- Output protected with a Isolator for open and short
- High stability, low ripple and excellent phase noise
- 5/10MHz External Reference option fitted as standard with automatic internal reference back-up
- LED alarms on front panel for control and monitoring
- Output frequency 70 MHz \pm 20MHz
- 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	3.625 - 4.200	GHz
Gain	30	dB
Gain adjust	100 in 10 & 1 steps	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	70 \pm 18	MHz
Return loss min.	20	dB
I/P level range	-30 to +10	dBm
Phase Noise	See table page 2	-
Frequency step size (minimum)	1	KHz
Stability time min.	$\pm 1 \times 10^{-9}$	/day
Stability temperature min.	$\pm 1 \times 10^{-8}$	/day
Mean Time Between Failure (MTBF)	50,000	Hours



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Physical Specification:

RF input connector		N-Type
Input impedance		50Ω
Output Intermediate Frequency		52 - 88MHz
Output impedance		50Ω
External reference		5/10MHz
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 LCDdisplay
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

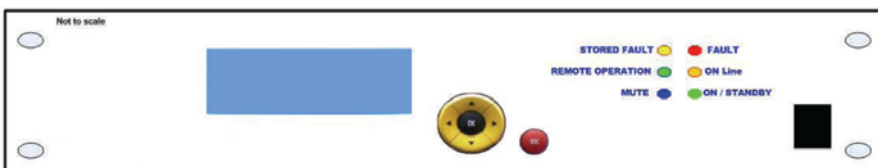
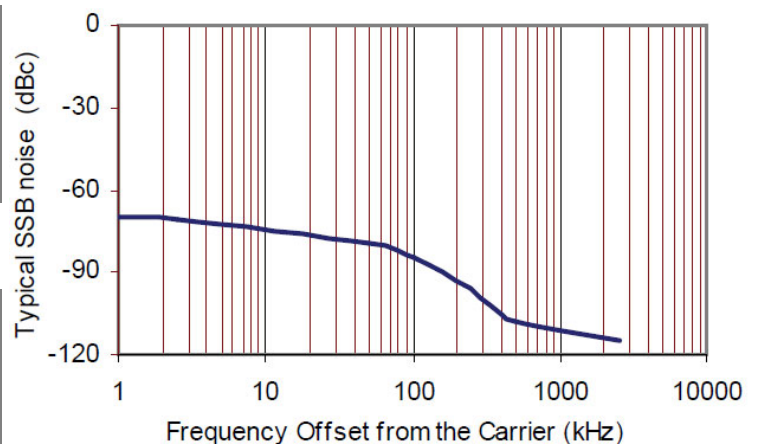
Environmental Specification:

Operating temperature range	0 to 45°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**