

V500 series Block DownConverters



VSAT DownConverter Products

- V510** C-Band (3.40-4.20GHz) to L-Band (1750-950MHz) Inverted spectrum
- V520** Ku-Band (10.95-11.70GHz) to L-Band (950-1700MHz)
- V521** Ku-Band (11.70-12.20GHz) to L-Band (950-1450MHz)
- V522** Ku-Band (12.25-12.75GHz) to L-Band (950-1450MHz)
- V523** Ku-Band (11.45 to 11.95) to L-Band (950-1450MHz)

The 19 inch 1U rack mounted **V500 series** of Block Frequency DownConverter units from Peak Communications are designed to take the incoming SHF signal and produce an output at L-Band.

The **V500 series** of units are mains powered and are constructed of robust components to give an adequate performance for VSAT satellite communication purposes and where ultimate stability, ripple and phase noise performance are not so critical.

Dual and Triple converter units

Dual and triple **1RU** high units are available in this series, which can be a mixture of bands. Each band has its own individual input and output connector. Please call our sales department with your requirements.



V500 Series - Typical Specification

SHF Input

Frequency	3.40-4.20GHz (V510) 10.95-11.70GHz (V520) 11.70-12.20GHz (V521) 11.45-11.95GHz (V523) 12.25-12.75GHz (V522)
Connector	50Ω, SMA (f)

L-Band Output

Frequency	950 up to 2000MHz, depending upon model
Spectrum sense	**Non-inverting apart from V510
Connector	75Ω, F-Type (f)
1dB GCP	+7dBm

Transfer Characteristics

Conversion gain	20dB nominal
LO frequency	5.15GHz (V510) 10.00GHz (V520) 10.75GHz (V521) 10.50GHz (V523) 11.30GHz (V522)
Phase noise	-75dBc/Hz at 1kHz
Stability	2ppm

Mechanical

Width	19" standard rack mounted
Height	1U (1.75")
Depth	~400mm (15.7"), plus connectors
Construction	Aluminium chassis
Weight	4.5 kgs (10lbs)

Control System Interface

Alarms	PSU fail
Connector	D-Type, 15-way

Environmental

Operating temp	0°C to +50°C
EMC	EN 55022 part B & EN 50082-1
Safety	EN 60950

Power Supply

Voltage	90-264VAC
Frequency	47-63Hz
Power	30 Watts max

Dual and Triple units

Input connectors	SMA (f), 50Ω
Output connectors	F-Type (f), 50Ω
Power consumption	50 Watts Max.
RF isolation	40dB

Rear panel View

