

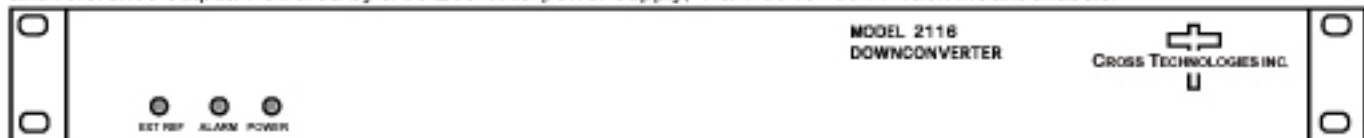


DATA SHEET

PRELIMINARY 9/28/04

2116-34 Block Downconverter

2116-34 Block Downconverter - Converts 3.4 - 4.2 GHz to .95 - 1.75 GHz with low phase noise and flat frequency response. Frequency translation is via a 5.15 GHz local oscillator. Front panel LEDs provide indication of DC power, external 10 MHz, and PLL alarm. Gain is +35 dB. Connectors are Type N female for the RF and BNC female for the IF and external reference input and reference output. Powered by a 90-260 VAC power supply; 1 3/4" X 19" X 14" rack mount chassis.



2116-34 DOWNCONVERTER

EQUIPMENT SPECIFICATIONS*

Input Characteristics

Impedance/Return Loss 50Ω/14 dB
 Frequency 3.4 to 4.2 GHz
 Noise Figure, Max. 20 dB max gain
 Input Level range -55 to -35 dBm
 Input 1 dB compression -25 dBm

Output Characteristics

Impedance/Return Loss 50 Ω /14 dB
 Frequency 0.95 to 1.75 GHz
 Output Level Range -20 to 0 dBm
 Output 1 dB compression +10 dBm

Channel Characteristics

Gain +35 dB ±2 dB
 Image Rejection > 60 dB, min
 Spurious, Inband SIGNAL RELATED<-60 dBC in band, 0 dBm out; SIGNAL INDEPENDENT, <-60 dBC
 Spurious, Out of band <-50 dBm
 Intermodulation <-55 dBC for two carriers each at -10 dBm out
 Frequency Response ±1.5 dB, 950 - 1750 MHz out; ± 0.5 dB, 40 MHz BW
 Frequency Sense Inverting

LO Characteristics

LO Frequency 5.15 GHz
 Frequency Accuracy ± 0.01 ppm max over temp internal reference; ext. ref. input

Phase Noise @ F (Hz) >	100	1K	10K	100K	1M
dBC/Hz	-70	-80	-90	-100	-110

10 MHz level 0 dBm, ± 3 dB, 75 ohms, External In or Internal out

Controls, Indicators

PWR Green LED
 PLL Alarm Red LED, External contact closure
 Ext 10 MHz Yellow LED, indicates external 10 MHz reference selected (rear panel DPDT switch)

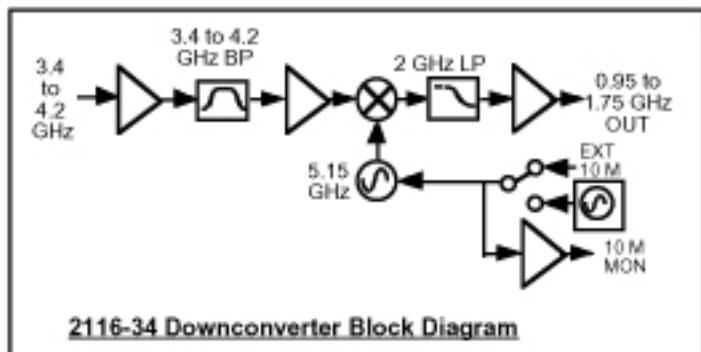
Other

CONNECTORS, FUNCTION >	RF	IF	10M REF IN	10M MON OUT
TYPE(FEMALE) /IMPEDANCE	N/50	BNC/50	BNC/75	BNC/75
OPTIONS	SMA/50	BNC/75,F/75,N/50		

Connector, Alarm DB9 - NO or NC contact closure on Alarm
 Size 19 inch standard chassis 1.75" high X 14.0" deep
 Power 90 - 260 VAC, 47 - 63 Hz, 45 watts max.

OPTIONS

Connectors Contact Cross Sales for option numbers



2116-34 Downconverter Block Diagram

*+10 to +40 degrees C; Specifications subject to change without notice



www.satcom-services.com

Mike Termond

mike@satcom-services.com

Phone: 1.805.649.1384

Fax: 1.805.649.1174