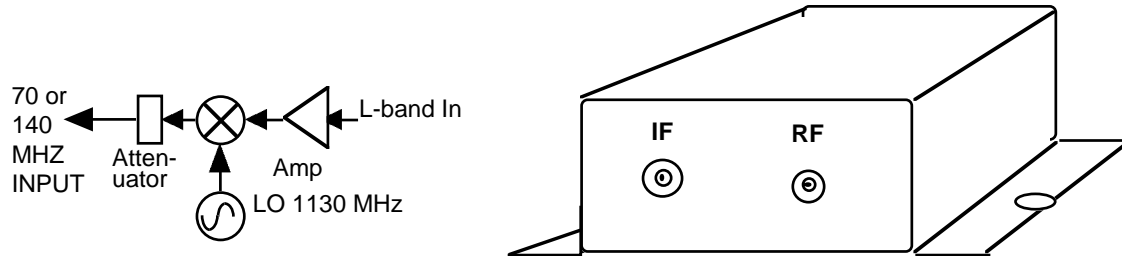


Series 2006-103 Fixed Frequency Test Downconverter

The Model 2006-103 Test Downconverter converts an L-Band to 70 or 140 MHz using an 1130 MHz local oscillator (LO).

EQUIPMENT DESCRIPTION

The L-band signal goes to an amplifier and is then mixed to 70 or 140 MHz with an LO of 1130 MHz. The mixer output goes to an attenuator providing a gain of -5dB. A green LED indicates the presence of DC power. Power is provided by a voltage on the L-band signal input and connectors are BNC female for the IF and F, female for the L-band RF. Wall power supply **option -P** is for 115 VAC, 60Hz and **option -P4** covers 90-260 VAC, 47-63 Hz. Specify US, EUR, AUS or UK plug for the -P4 option.



2006-103 Test Downconverter Block Diagram and Chassis

EQUIPMENT SPECIFICATIONS*

Input Characteristics

Impedance/RL	75 Ω /12 dB
Frequency, LO	1130 MHz
Frequency, High	1200 (70M IF) or 1270 (140M IF) (non-inverting) OR
Frequency, Low	1060 (70M IF) or 990 (140M IF) (inverting)
Input Level	-15 to -25 dBm
Input 1 dB	-10 dBm

Output Characteristics

Input Impedance/RL	75 Ω /15 dB
Frequency	70 or 140 MHz center depending on the input signal
Output Level	-20 to -30 dBm with -15 to -25 dBm in

Channel Characteristics

Gain	-5 dB \pm 2 dB
Spurious Response	output not filtered; < -40 dBC inband \pm 20 MHz
Image rejection	No image rejection. Must use a clean carrier with no signals in the image frequency band
Frequency Response	\pm 0.5 dB, any 10 MHz increment, \pm 1.0 dB, any 40 MHz increment

Synthesizer Characteristics

Frequency Accuracy	\pm 25 kHz max
Phase Noise (dBC/Hz)	\leq -80, 10 kHz; \leq -90, 100 kHz; \leq -100, 1 MHz
Frequency Selection	NONE: Fixed tuned

Controls/Indicators

Controls	None
DC Power	Green LED

Other

RF, IF Connectors	F, female, BNC, female
Size (W x H x D)	3.3 x 1.2 x 4.0 (in.); 83.8 x 30.5 x 101.6 (mm)
Power	+16 to +20VDC, 150 mA, max. on RF In
option -P Wall PS	115 VAC, 60Hz
option -P4 Wall PS	90-260 VAC, 47-63 Hz. Specify US, EUR, AUS or UK plug for the -P4 option

*+10 to +40 degrees C; 2000 meters max elevation; 80% max humidity; Pollution Degree 2; Specifications subject to change without notice

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