

## Series 2006 Fixed Frequency Upconverters

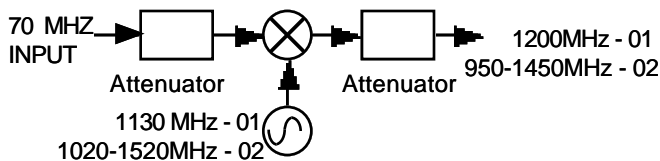
The Model 2006-01 Upconverter, 1130 MHz LO converts a 70 or 140 MHz signal to L-Band with a 1130 MHz LO frequency. The Model 2006-02 Upconverter converts a 70 or 140 MHz IF signal to L-Band at a frequency specified by the customer.

### EQUIPMENT FEATURES

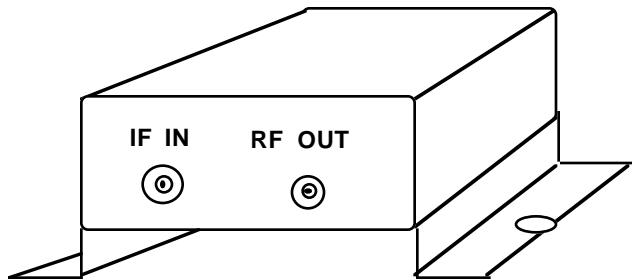
- Low phase noise, Phase Locked Loop oscillator
- 70 or 140 MHz Input, L-Band Output

### EQUIPMENT DESCRIPTION

The 70 or 140 MHz carrier input is mixed with a 1130 MHz local oscillator (LO) signal for the 2006-01 and a customer specified LO from 1020 to 1520 MHz for the 2006-02. The 2006-02's frequency can be changed in the field by replacing the controller IC. The mixer output is applied to the output attenuator providing a nominal gain of -25dB. A green LED indicates the presence of DC power. Power is provided by the LNB voltage from the receiver under test and connectors are BNC female for the 70 MHz input and F, female for the RF output. The Series 2006 Test Upconverters can be powered by an optional wall power supply.



**2006 Test Upconverter Block Diagram**



**2006 Test Upconverter**

### EQUIPMENT SPECIFICATIONS\*

<b>Input Characteristics</b>	<b>2006-01</b>	<b>2006-02</b>
Input Impedance/RL	75 Ω /10db	75 Ω /10db
Frequency	70 or 140 MHz center	70 or 140 MHz center
Input Level	-10 to -20 dBm	-10 to -20 dBm
Input 1dB/3RD ORDER	0 / +10 dBm	0 / +10 dBm
<b>Output Characteristics</b>		
Impedance/RL	75 Ω/8db	75 Ω/8db
Frequency , LO	1130 MHz	1020 - 1520 MHz, Customer specified
Frequency , Ku, 70 in	1200 MHz	LO + 70, +140
Frequency , C, 70 in	1060 MHz	LO - 70, -140
Level	-35dBm, with -10dBm in	-35dBm, with -10dBm in
<b>Channel Characteristics</b>		
Gain	-25dB ±5 dB	-25dB ±4 dB
Spurious Response	NA; output not filtered	NA; output not filtered
Frequency Response	±0.7 dB, any 10 MHz incr.	±0.5 dB, any 10 MHz incr.
<b>Synthesizer Characteristics</b>		
Frequency Accuracy	± 25 kHz max	± 25 kHz max
Phase Noise (dBC/Hz)	≤ -80, 10 kHz; ≤ -90, 100 kHz; ≤ -100, 1 MHz	
Frequency Selection	NONE: Fixed tuned	Field changeable
<b>Indicators</b>		
DC Power	Green LED	Green LED
<b>Other (Applies to both 2006-01 and 2006-02)</b>		
RF, IF Connectors	F, female, BNC, female	
Size	3.4" wide X 1.7" high X 4.0" deep	
Power	+14 to +20VDC, 150 ma on RF In; Optional wall mount power supply	

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