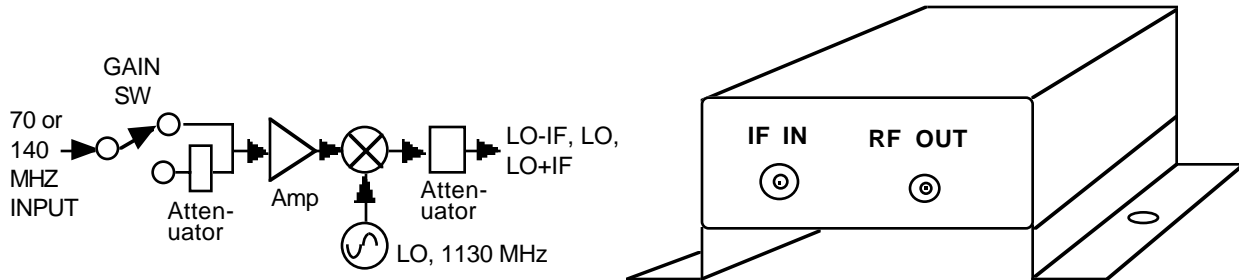


**Series 2006-11, -12 Fixed Frequency Upconverter**

The Model 2006-11 Upconverter converts a 70 or 140 MHz signal to L-Band with a 1130 MHz LO frequency (-11) or to L-Band at a frequency specified at order (-12) for loop-back applications. The 70 or 140 MHz IF input signal first goes to the gain selection switch providing a gain of -5dB (high gain) or -25 dB (low gain). 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 IF input and F, female for the RF output.



**2006-11, -12 Test Upconverter Block Diagram and Chassis**

**EQUIPMENT SPECIFICATIONS\***

|  | <b><u>2006-11</u></b>   | <b><u>2006-12</u></b>   |
|--|---|-------------------------|
| <b>Input Characteristics</b>                       |   |                         |
| Input Impedance/RL                                 | 75 Ω /15 dB   | 75 Ω /15 dB             |
| Frequency  | 70 or 140 MHz center  | 70 or 140 MHz center    |
| Input Level, range                                 | -30 to -10 dBm (low gain), -50 to -30 dBm (high gain)                                   |                         |
| Input 1 dB Compr                                   | +0 dBm (low gain), -20dBm (high gain)   |                         |
| <b>Output Characteristics</b>                      |   |                         |
| Impedance/RL                                       | 75 Ω /12 dB   | 75 Ω /12 dB             |
| Freq. , LO   | 1130 MHz  | 1020 - 1520 MHz, fixed  |
| Freq. , Ku, 70 MHz                                 | 1200 MHz  | LO + 70, +140 MHz       |
| Freq. , C, 70 MHz                                  | 1060 MHz  | LO - 70, -140 MHz       |
| Level, with -10 dBm in                             | -35 dBm (low gain)  | -35 dBm (low gain)      |
| <b>Channel Characteristics</b>                     |   |                         |
| Gain   | -25, ±3 dB (low gain); -5, ±3 dB (high gain);   |                         |
| Spurious Response                                  | NA; output not filtered   | NA; output not filtered |
| Frequency Response                                 | ±0.5 dB, over 10 MHz  | ±0.5 dB, over 10 MHz    |
| <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   | 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 1.2" high X 4.0" deep   |                         |
| Power  | +14 to +20 VDC, 150 ma on RF In;<br>(-P) +15 VDC, 150 ma, 115 VAC,<br>wall power supply |                         |
| Approvals  | UL, FCC, CE   |                         |

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

