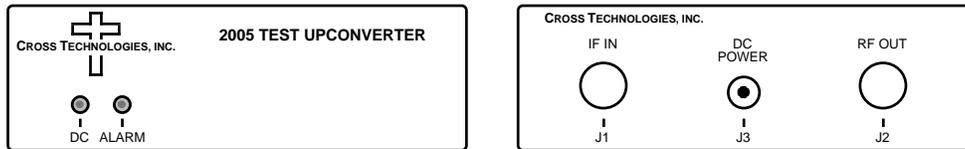


2005-23 Upconverter, Fixed Frequency, 2.33 - 2.34 GHz

The 2005 Upconverter converts a 65 to 75 MHz IF signal to **2.33 to 2.34 GHz** in 1 KHz **resolution** with a low side LO (Ku) for loop-back applications. Featuring low phase noise, these units are used to loop 70 MHz modulators to **S-band** receivers in uplinks. The 65 to 75 MHz carrier input is mixed with a synthesized local oscillator (LO) signal. The **LO** is factory set to **2,200,000 to 2,400,000 KHz in 1 KHz resolution**. Front panel LEDs light when DC power is applied (green) and when a PLL alarm occurs (red). The mixer output is applied to the output amplifier providing a nominal gain of -10 dB. Power is provided by the LNB voltage from the receiver under test and connectors are BNC female for both the IF input and the RF output. Wall power supply **option -P** is for 120 VAC, 60Hz. The 2005 can be mounted on a 1 3/4" X 19" 1RU rack mount panel (**option -R**).



2005-23 FRONT AND REAR PANELS

EQUIPMENT SPECIFICATIONS*

Input Characteristics

Impedance / RL	50/75Ω / 12dB
Frequency	65 to 75 MHz center
Level	-30 to -10 dBm
1dB Comp / 3rd Order	0dBm / +10dBm

Output Characteristics

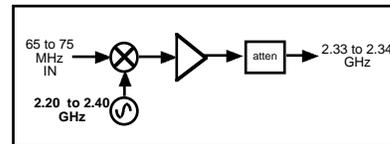
Impedance / RL	50/75Ω / 8dB
Frequency	2.33 to 2.34
Level	-40 to -20 dBm

Channel Characteristics

Gain	-10dB ± 3dB
Spurious Response	NA; output not filtered

Synthesizer Characteristics

Frequency Accuracy	± 100 kHz maximum
Frequency Resolution	1.0 KHz minimum



2005-23 BLOCK DIAGRAM

Phase Noise @ Freq	10kHz	100kHz	1MHz
dBC/Hz	-80	-90	-100

Indicators

PLL Alarm	Red LED
DC Power	Green LED

Other

RF Connectors	BNC (female)
IF Connectors	BNC (female)
Size, Bench Top	4.7" wide X 1.75" high X 6.5" deep
Size, (option -R)	19 inch standard 1RU chassis, 1.75" high X 7.0" deep (optional)
Power	+14 to +24 VDC, 180 mA from LNB on RF OUT
Power (option -P)	120 ±10% VAC, 60 Hz, 10 watts max, wall mount power supply (optional)
Power (option -C)	Power Supply not included. Requires Cross 2000-01 Power Supply

*10°C to 40°C; Specifications subject to change without notice