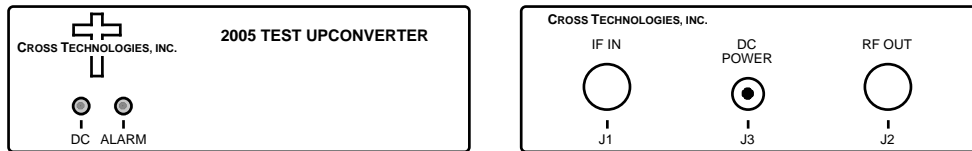


**2005-23 Test Upconverter, Fixed, 2.33 - 2.34 GHz**

The 2005 Test Upconverter converts a 65 to 75 MHz IF signal to 2.33 to 2.34 GHz in 1 MHz steps with a low side LO (Ku). Featuring low phase noise, these units are used to loop 70 MHz modulators to L-band receivers in uplinks. The 65 to 75 MHz carrier input is mixed with a synthesized local oscillator (LO) signal. The output frequency is factory set. 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**

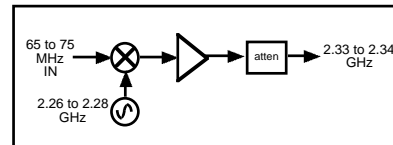
Impedance / RL 50/75Ω / 8dB  
 Frequency 2.33 to 2.34  
 Level -40 to -20 dBm

**Channel Characteristics**

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

**Synthesizer Characteristics**

Frequency Accuracy ± 100 kHz maximum  
 Frequency Step 1.0 MHz 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)

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