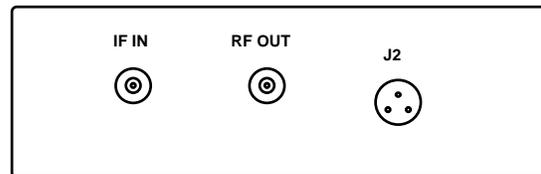
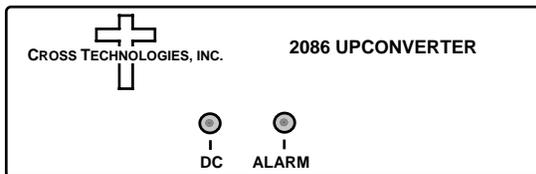


## 2086-XXX Upconverter, Fixed Freq., 0.95-1.75 GHz

The 2086-XXX Upconverter converts a 70 MHz IF signal to a fixed frequency (X.XX GHz) in the 0.95 to 1.75 GHz band with no spectrum inversion, low group delay, and flat frequency response. The 70 MHz IF input is mixed with a fixed frequency local oscillator (LO) signal to X.XX GHz. The frequency is fixed and specified by the customer. A green front panel LED lights when DC power is applied and a red LED lights if the phase lock loop for the LO is in alarm. Connectors are BNC female for the IF input and Type F female for the RF output. Power is provided by a  $120 \pm 10\%$  VAC, 60Hz, wall mount power supply. The 2086 Upconverter is housed in a 4.7" wide X 1.75" high X 12.5" deep aluminum chassis. The 2086 can be mounted on an 1 3/4" X 19" rack mount panel (**option -R**). The 2086 can also be powered by the 2000-01 switching power supply using **option -C** which includes no power supply.



**2086 Upconverter Front and Rear Panel**

### EQUIPMENT SPECIFICATIONS\*

#### Input Characteristics

Input Impedance/RL	75 $\Omega$ /18 dB
Frequency	70 $\pm$ 18 MHz
Input Level range	-10 to -20 dBm
Input 1 dB comp.	0 dBm

#### Output Characteristics

Impedance/RL	75 $\Omega$ /12 dB
Frequency	X.XX GHz

#### Channel Characteristics

Gain	0 $\pm$ 1.0 dB
Spurious Response	< -50 dBC
Frequency Response	$\pm$ 0.5 dB, $\pm$ 18 MHz
Group Delay, max	0.01 ns/MHz <sup>2</sup> parabolic; 0.03 ns/MHz linear; 1 ns ripple

#### Synthesizer Characteristics

Frequency Accuracy	$\pm$ 25 kHz max over temp
Tuning steps	none, fixed tuned
Phase Noise (dBC/Hz)	$\leq$ -70 @ 1 kHz; $\leq$ -80 @ 10 kHz; $\leq$ -95 @ 100 kHz; $\leq$ -110 @ 1 MHz

#### Indicators

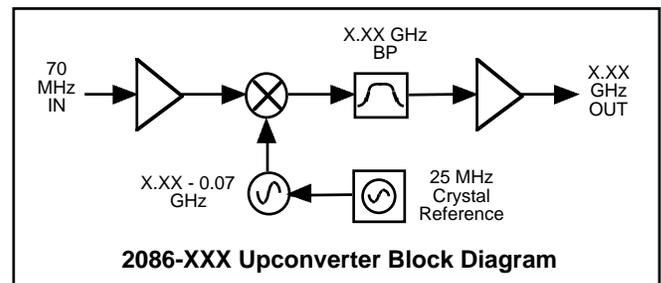
DC Power	Green LED
PLL Alarm	Red LED

#### Other

RF Connector	Type F (female)
IF Connector	BNC (female)
Size, Bench Top	4.7" wide X 1.75" high X 12.5" deep
Size, Rack Mount (-R)	19 inch standard chassis 1.75"high X 13.0" deep (Optional)
Power	120 $\pm$ 10% VAC, 60Hz, 20 watts max, wall mount power supply

#### Model Numbers

-R	Rack Mount
-C	No power supply, use with 2000-01 power supply
Call for frequencies	



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