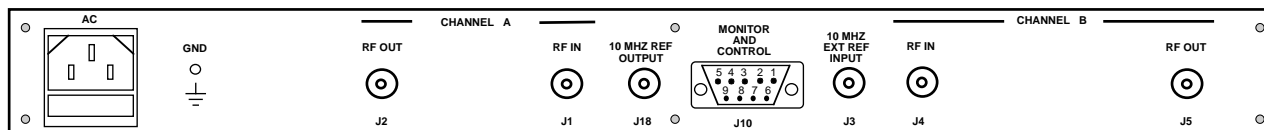
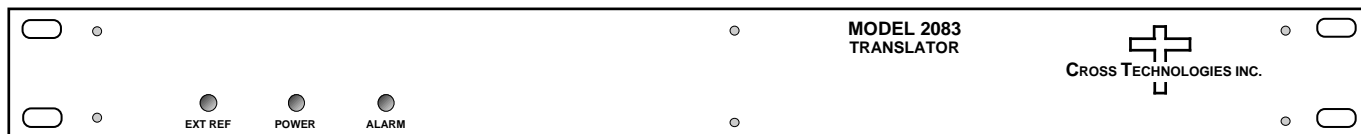


**2083-0372 Dual Translator, 370 ± 150 MHz to 720 ± 150 MHz**

**2083-0372 Dual Translator** - Consists of two converters (inverted spectrums) each of which convert a **370 ± 150 MHz** signal to a **720 ± 150 MHz** (**LO =1.09 GHz**). The two **370 ± 150 MHz** inputs are filtered and then mixed with a **1.09 GHz** synthesized local oscillator (LO) signal to **720 ± 150 MHz**. The mixer output is applied to the output filters and amplifier. The converters have a nominal gain of 0±2 dB. All connectors are 75 ohm BNC female. Front panel LEDs light when DC power is applied (green), a PLL alarm occurs (red), the unit detects presence of EXT input (yellow). The 2083-0372 is powered by a 100-240 ± 10% VAC power supply and housed in a 1.75" X 19" X 16" 1RU chassis.



**EQUIPMENT SPECIFICATIONS\***

**Input Characteristics**

Input Impedance/RL 75 Ω /12 dB  
 Frequency, **370 ± 150 MHz**  
 Input Level **-10 to -50 dBm**  
 Input 1 dB compression 0 dBm

**Output Characteristics**

Impedance/RL 75 Ω /12 dB  
 Output 1 dB compression 0 dBm  
 Output Level, Range **-10 to -50 dBm**  
 Frequency **720 ± 150 MHz**

**Channel Characteristics**

Gain at band center 0 dB ±2 dB, fixed  
 Frequency Response ±1.5 dB, **720 ± 150 MHz** out; ± 0.7 dB, any 36 MHz increment  
 Frequency Sense Inverting (**0.22 GHz** Translates to **.87 GHz**, **0.52 GHz** Translates to **0.57 GHz**)  
 Intermodulation <-50 dBC for two carriers each at -13 dBm out  
 Spurious Response **<-35 dBC, for 370 ± 150 MHz input to 720 ± 150 MHz out**  
**0.22-0.52GHz Feedthru < 0 dBC, min, <-10 dBC, goal**  
**LO rejection <-20 dBm, LO at the output**

**Synthesizer Characteristics**

**LO frequency 1.09 GHz**  
 Frequency Accuracy ± 1.0 ppm max

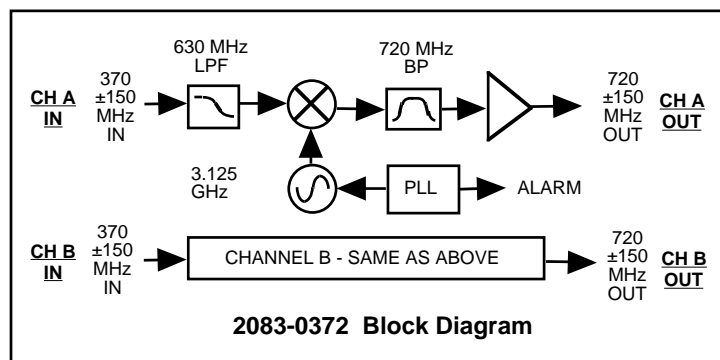
Phase Noise @ F (Hz) >	100	1K	10K	100K	1M
dBC/Hz	-70	-80	-85	-95	-110

**Indicators**

Power; PLL Alarm; **Ext.Ref.** Green LED; Red LED; **Yellow LED**

**Other**

Connectors RF in and RF Out, BNC, female, 75 ohm  
 Connector, Alarm DB9 - NO or NC contact closure on Alarm  
 Size 19 inch, 1RU standard chassis 1.75"H X 16.0"D  
 Power 100-240 ± 10% VAC, 47-63 Hz, **15** watts max



**Available Options**

E - External 10 MHz ref in & out  
 H - High Stability (±0.01ppm) Internal Ref

**Connectors/Impedance (In & Out)**

Std. - 75Ω BNC  
 D - 50Ω BNC  
 SS- 50Ω SMA

**Contact Cross for other options**

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

