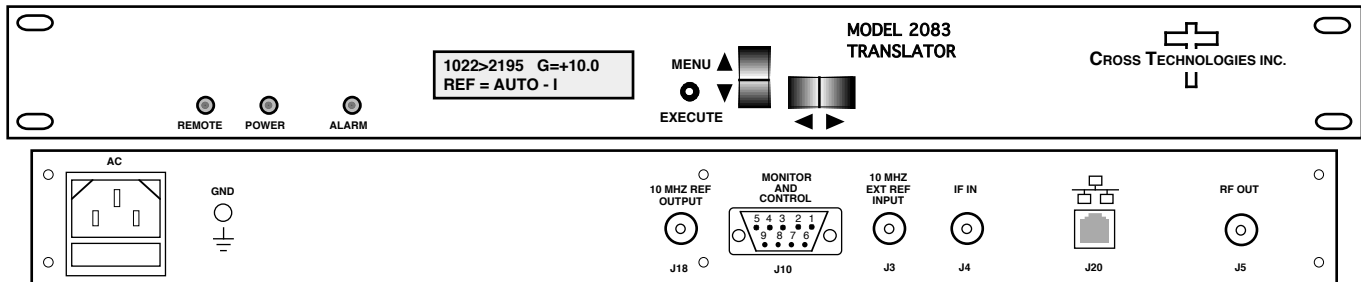


2083-1022 Block Translator, 1022-1522 to 2195-2695 MHz

2083-1022 Block Translator - The 2083-1022 Block Translator converts a 1022-1522 MHz block to 2195-2695 MHz block with no spectrum inversion, low group delay and flat frequency response. The 1022-1522 MHz input is mixed with synthesized local oscillator (LO) signals, first to 3755 MHz center frequency and finally to the **2195-2695 MHz** block output. The gain can be set for **0 to +25 dB** in 0.5±0.5 dB increments. Multifunction switches select the Gain and internal or External (**Option E**) 10 MHz reference which appear on the LCD display and can be adjusted remotely. Front panel LEDs provide indication of DC power (green), PLL alarm (red), and remote operation (yellow). Connectors are **BNC female** for RF input and output. The unit is powered by a 100-240 ±10% VAC, 47-63 HZ input power supply and housed in a 1 3/4" X 19" X 16" rack mount chassis.



2083-1022 Front and Rear Panels (Shown with optional Ethernet and option E)

EQUIPMENT SPECIFICATIONS*

Input Characteristics

Input Impedance/RL **50Ω /12 dB**
 Frequency **1022 - 1522 MHz**
 Input **Composite** Level **-40 to -20 dBm**
 Input, max. no damage **+15 dBm**

Output Characteristics

Impedance/RL **50Ω/12 dB**
 Frequency **2195 - 2695 MHz**
 Output **Composite** Level **-20 to 0 dBm**
 Output 1 dB compression **+10 dBm, at max gain, at Fc**

Channel Characteristics

Gain, **Max.; Range** **+25 ±1 dB Max. at Fc; 0 to +25 dB Range, selectable in 0.5±0.5 dB steps at Fc**
 Frequency Response **± 1.5 dB, 500 MHz bandwidth; ± 0.5 dB, any 40 MHz increment**
 Spurious, Inband **< -50 dBc in band, signal dependent and independent; 0 dBm out, at Gmax; See NOTE 1**
 Spurious, out of band **< -30 dBc, 500- 2195 MHz and 2695-3500 MHz; 0 dBm out, at Gmax; See NOTE 1**
 Frequency Sense **Non-inverting**

Synthesizer Characteristics

Translation; Accuracy **1ppm; Option -H, ±0.01 ppm**
 Reference **10 MHz Internal; Option -E, Internal/ External selection**
 Frequency Step **None, fixed frequency**

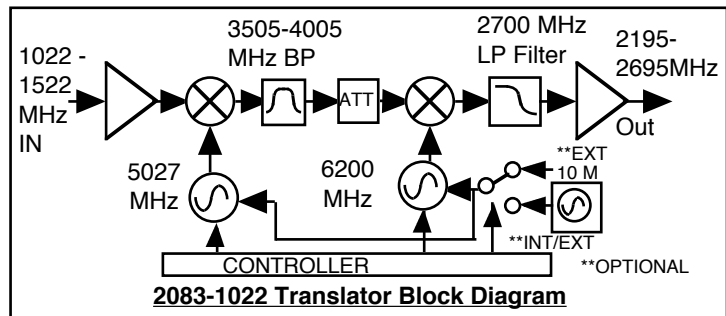
Phase Noise @ F (Hz) >	100	1K	10K	100K	1M
dBc/Hz	-70	-70	-80	-90	-100

Controls, Indicators

Fc Translation **Direct readout LCD; manual or remote selection**
 Gain (MGC) **Direct readout LCD; manual or remote selection**
 Ext. ref. (Option -E) **Direct readout LCD; manual or remote selection**
 Power; Alarm; Remote **Green LED; Red LED; Yellow LED**
 Remote **RS232C, 9600 baud ; RS485, Ethernet Options**

Other

RF In/RF Out Connector **BNC (female), 50Ω, See option chart**
 10 MHz Connector **BNC (female), 75Ω, works with 50 or 75 ohms**
 Alarm/Remote Connector **DB9 (female) - NO or NC contact closure on Alarm**
 Size **19 inch standard chassis 1.75" High X 16.0" Deep**
 Power **100-240 (±10%) VAC, 47-63 Hz, 30 watts max.**



NOTE 1: dBc is relative to the COMPOSITE Output Level

Available Options

E - External 10 MHz Input & Output
 H - High Stability (±0.01ppm) Internal Ref
Comm. Interface/Standard RS232
 Q - RS485 Remote Interface
 W8 - Ethernet; w/Web Browser (WB)
 W18 - Ethernet; w/WB & SNMP
 W28 - Ethernet; w/TCP/IP, Telnet
 W828 - W8 +W18 +W28
Connectors/Impedance
 Std. - 50Ω BNC (RF IN), 50Ω BNC (RF OUT)
 NN - 50Ω N (RF IN), 50Ω N (RF OUT)
 SS - 50Ω SMA (RF IN), 50Ω SMA (RF OUT)
Contact Cross for other options

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