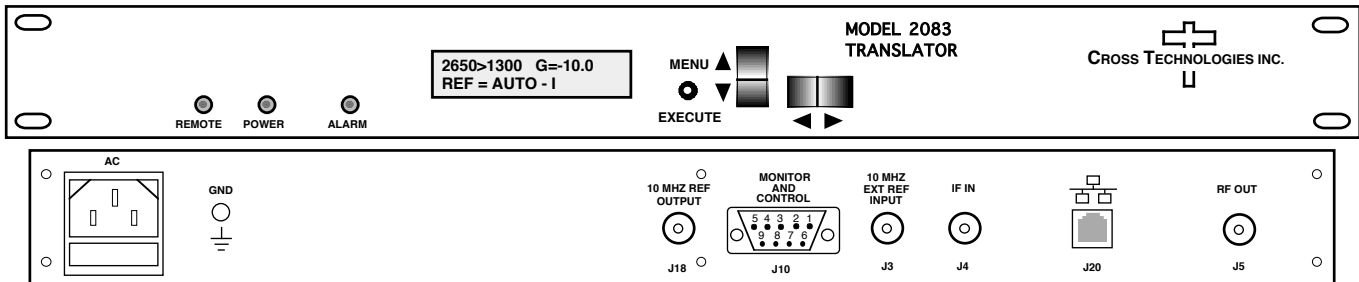


2083-2713 Block Translator, 2550-2750 to 1200-1400 MHz

The 2083-2713 Block Translator converts a 2550-2750 MHz block to 1200-1400 MHz block **with or without spectrum inversion (selectable)**, low group delay and flat frequency response. The **2550-2750 MHz** input is mixed with synthesized local oscillator (LO) signals, first to a 400 MHz center frequency and finally to the **1200-1400 MHz** block output. The gain can be set for **0 to -30 dB in 0.5 ± 0.5 dB increments**. The output translation is fixed. Multifunction switches select Gain and internal or External 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 and 10 MHz input and output. It 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.



2083-2713 Front and Rear Panels (Shown with optional Ethernet)

EQUIPMENT SPECIFICATIONS*

Input Characteristics

Input Impedance/RL **50Ω /14 dB**
 Frequency **2550 - 2750 MHz**
 Input Level **-15 to 0 dBm**

Output Characteristics

Impedance/RL **50Ω/14 dB**
 Frequency **1200 - 1400 MHz**
 Output Level **-30 to -15 dBm**
 Output 1 dB compression **-5 dBm, at max gain**

Channel Characteristics

Gain, max; adjustment **+0 dB ±1 dB, max. gain; 0 to -30 dB gain adjustment in 0.5 ± 0.5 dB Steps**
 Spurious, Inband **< -55 dBC in band, signal dependent and signal independent; -15 dBm Out**
 Spurious, out of band **< -50 dBm, 0.75-1.19 GHz and 1.41-1.69 GHz Out**
 Intermodulation **< -55 dBC for two carriers each at -20 dBm out**
 Frequency Response **± 2.0 dB, 200 MHz bandwidth; ± 1.0 dB, any 100 MHz bandwidth; ± 0.5 dB, any 20 MHz increment**
 Frequency Sense **Non-inverting or Inverting, selectable**

Synthesizer Characteristics

Translation; Accuracy **± 1ppm; Option H, ±0.01 ppm**
 Reference **10 MHz Internal; Internal/ External selection**

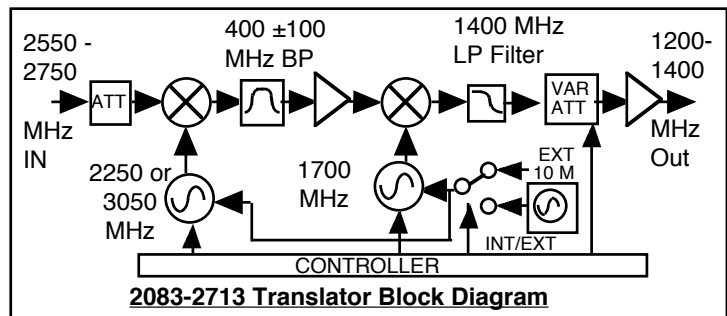
Phase Noise @ F (Hz) >	100	1K	10K	100K	1M
dBC/Hz	-70	-80	-80	-95	-100

Controls, Indicators

Gain (MGC) Direct readout LCD; manual or remote selection
 Ext. ref. Direct readout LCD; manual or remote selection
 Power; Alarm; Remote Green LED; Red LED; Yellow LED
 Remote RS232C/RS485/422, 9600 baud (Ethernet Optional)

Other

RF In/RF Out Connector **BNC (female)**
 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.**



2083-2713 Translator Block Diagram

Available Options

H - High Stability (±0.01ppm) Internal Ref
Comm. Interface/Standard RS232
 W8 - Ethernet; w/Web Browser (WB)
 W18 - Ethernet; w/WB & SNMP
 W28 - Ethernet; w/TCP/IP, Telnet

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