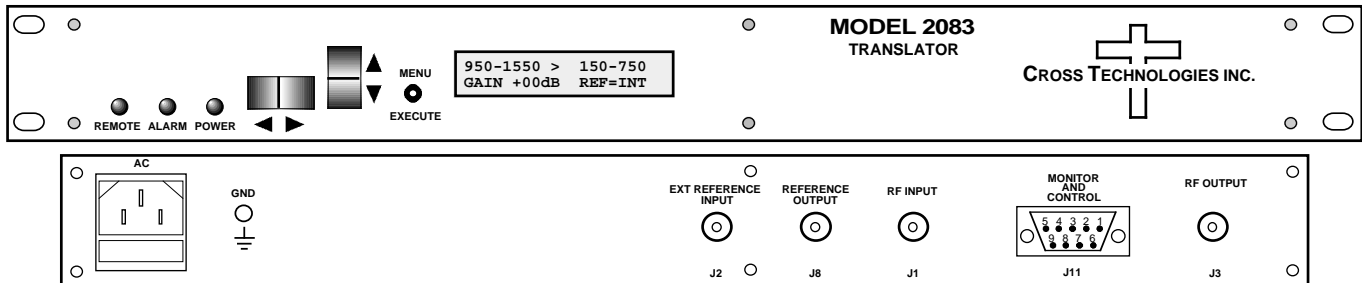


2083-218# Block Translator, 950-1550 MHz or 1450-2050 MHz to 150-750 MHz

2083-218# Block Translator - The 2083-218# Block Translator converts a **950-1550 or 1450-2050** block to the 150-750 MHz block with no spectrum inversion, low group delay and flat frequency response. The 950-2050 MHz input is filtered and translated to the 150-750 MHz block output using dual conversion. The **gain can be set for -10 to +10 dB, in 1 ±1dB steps. Multifunction switches select the Gain and the translation band** 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 external 10 MHz option E** includes a 10 MHz output connector which contains either the internal or external 10 MHz reference signal. 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.



2083-218# Block Translator front and rear panels (shown with option E)

EQUIPMENT SPECIFICATIONS*

Input Characteristics

Input Impedance/RL **50 Ω /12 dB**
 Bands 1 **950-1550 MHz**
 Bands 2 **1450-2050 MHz**
 Input Level **-5 to -25 dBm**
 Input, max. no damage **+10 dBm**

Output Characteristics

Impedance/RL **50 Ω/12 dB**
 Frequency **150-750 MHz**
Output Level **-5 to -25 dBm**
 Output 1 dB compression **+5 dBm at max gain**

Channel Characteristics

Gain, max., Range **+10 dB, ± 2 dB, adjustable in from -10 to +10 dB in 1 ± 1dB steps**
Frequency Response **± 2.0 dB, 600 MHz bandwidth; ± 0.5 dB, 36 MHz increment**
Spurious, Inband **< -45 dBC in band, 150-750 MHz out**
Spurious, 0.95-2.05 GHz **< -45 dBm; < -45 dBC, 0.95-2.05 GHz feed through rejection**
Group Delay, max. **0.015 ns/MHz², parabolic, 0.03ns/MHz, linear, 1 ns ripple, 36 MHz BW**
Frequency Sense **Non-inverting**

Synthesizer Characteristics

Frequency Accuracy **±0.01 ppm**
Reference **10 MHz Internal (External ref, option E)**

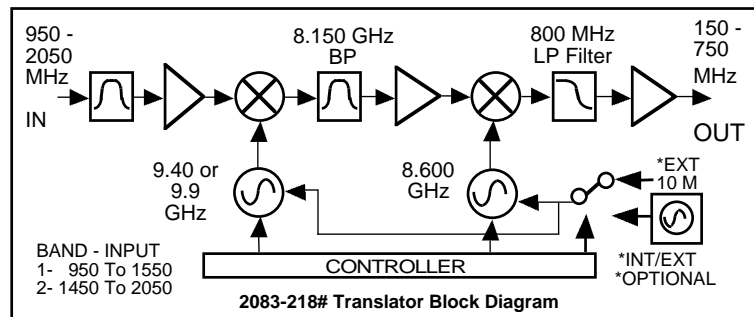
Phase Noise @ F (Hz) >	100	1K	10K	100K	1M
dBC/Hz	-70	-75	-85	-95	-105

Controls, Indicators

Frequency Translation Setting Shown on LCD Display
Gain Direct readout LCD; manual or remote selection
Power; Alarm; Remote Green LED; Red LED; Yellow LED
Remote RS232C, 9600 baud, **W8, W18 Ethernet, optional**

Other

RF In/RF Out Connector **BNC (female)**
10 MHz Connectors (E) **BNC (female), 75Ω, works with 50 or 75 ohms (option E)**
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.**



Available Options

E - External 10 MHz ref input & output
M&C Interface RS232 Standard.
Q - RS485 Remote Interface
W8 - Ethernet M&C Web Browser Interface
W18 - Ethernet M&C Web Browser Interface and SNMP

Connector/Impedance

B - 75Ω BNC (RF In), 75Ω BNC (RF Out)

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