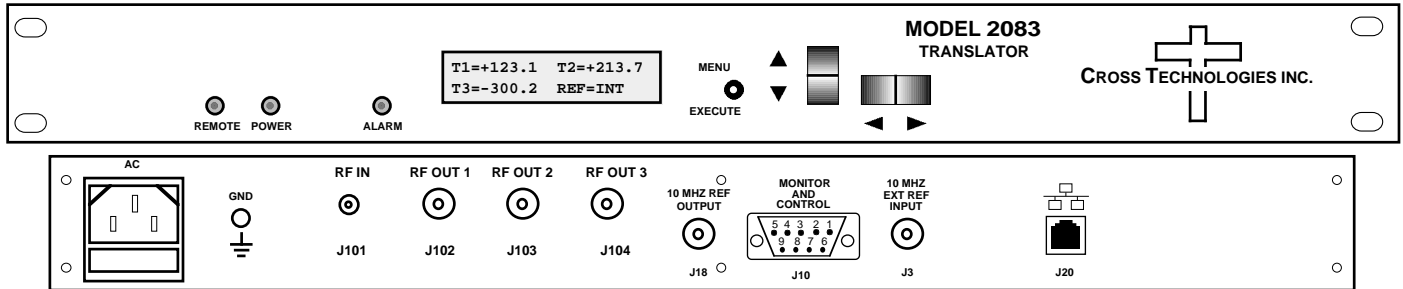


**2083-13-1518 Block Translator, 3 Channel, 950-1450 MHz to 600-1800 MHz**

**2083-13-1518 Block Translator, 3 Channel** - The 2083-13-1518 Block Translator, 3 Channel, converts a single 950-1450 MHz block input to three independently tuned 500 MHz block outputs in the **600-1800 MHz** range (-350 to +350 MHz translation in 100 kHz steps) with no spectrum inversion, low group delay and flat frequency response. The 950-1450 MHz input is translated to a 500 MHz block in the **600-1800 MHz** range using dual conversion. The gain is 0 ±3dB at Fc. Multifunction switches select the translation frequency of each channel 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 **SMA female for the RF input**, type F female for the RF output and BNC female for the external 10 MHz reference input and 10 MHz reference output. The 10 MHz output connector contains either the internal or external 10 MHz reference signal. The unit is powered by a 100-240 ± 10% VAC power supply, and housed in a 1.75" X 19" X 16" 1RU chassis.



**2083-13-1518 Block Translator, 3 Channel front and rear panels (shown with Ethernet option)**

**EQUIPMENT SPECIFICATIONS\***

**Input Characteristics**

Input Impedance/RL **50 Ω /12 dB**  
 Frequency **950-1450 MHz**  
 Input Level **-10 to -20 dBm**  
 Input, max. no damage **+10 dBm**

**Output Characteristics (each Channel)**

Impedance/RL **75 Ω/10 dB**  
 Frequency (500 MHz band) **600-1800 MHz** range  
 Output Level **-10 to -20 dBm**  
 Output 1 dB compression **0 dBm**

**Channel Characteristics**

Gain, at Fc **0 dB, ± 3 dB, Fixed**  
 Frequency Response **± 2.0 dB, 500 MHz bandwidth; ± 0.5 dB, 36 MHz increment**  
 Spurious, Inband **< -45 (-50 typ) dBc** in band, (in the selected 500 MHz band in the **600-1800 MHz** range)  
 Spurious, 0.6- 1.45 GHz **< -45 dBm; < -45 (-50 typ) dBc**, 0.95-1.45 GHz feed through rejection  
 Spurious, out of band **< -45 dBm, 250 MHz** above and below the selected 500 MHz band  
 Frequency Sense **Non-inverting**

**Synthesizer Characteristics**

Frequency Accuracy **±0.01 ppm**  
 Frequency Step **100 kHz; -350 to + 350 MHz Translation adjustment**

Phase Noise @ F (Hz) >	100	1K	10K	100K	1M
dBC/Hz	-60	-70	-80	-90	-100

10 MHz Level (In or Out) **3 dBm, ± 3 dB, (75Ω works with 50 or 75 ohms)**

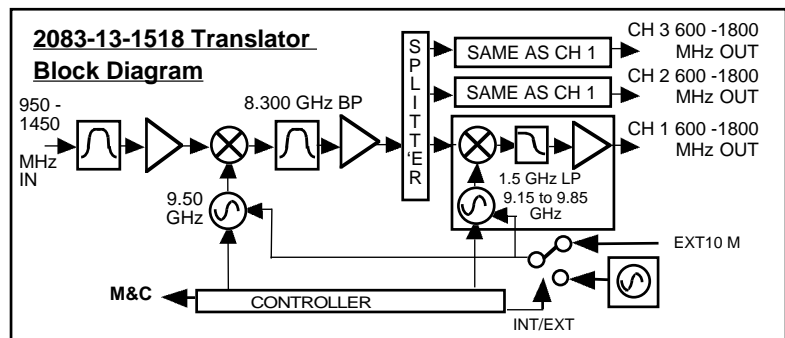
**Controls, Indicators**

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, RS485, Ethernet, optional**

**Other**

RF In/RF Out Connector **SMA (Female)/Type F (female)**  
 10 MHz Connectors **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**

**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

**Connectors/Impedance**

B - 75Ω BNC (RF In), 75Ω BNC (RF Out)  
 D - 50Ω BNC (RF In), 50Ω BNC (RF Out)

**Contact Cross for other options**

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

