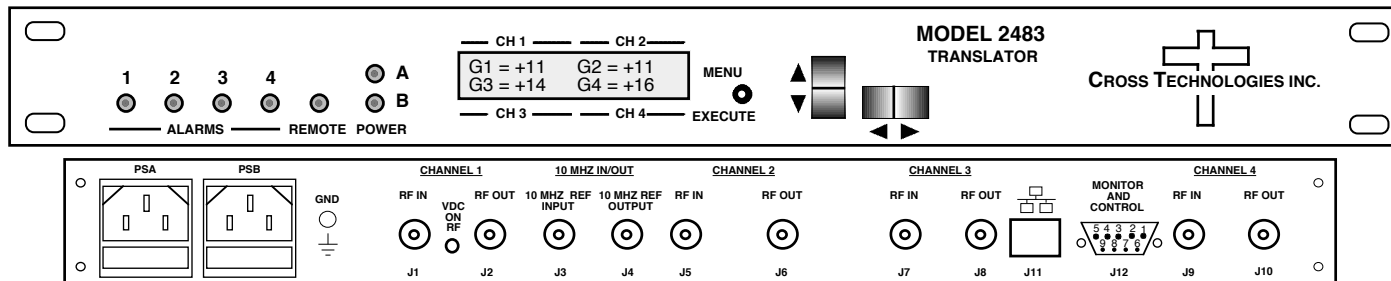


2483-40311 Translator, 0.22 - 0.38 GHz to 0.97 - 1.13 GHz, Four Channel

2483-30311 Three Channel • 2483-20311 Two Channel • 2483-10311 One Channel

The 2483-40311 Translator has four individual channels, each one converts 220 to 380 MHz (300 ± 80 MHz) to 970 to 1130 MHz with low group delay and flat frequency response. Synthesized local oscillators (LO) provide frequency selection. Push button switches select the gain and other parameters. Front panel LEDs provide indication of DC power, PLL alarm and Remote operation. Gain is adjustable manually over a 0 to +20 dB range in 0.5 ± 0.5 dB steps. The gain of each channel is also remotely selectable. Parameter selection and gain settings appear on the LCD display. Connectors are BNC female for the RF IN and RF OUT and external 10 MHz reference input and output. The table below shows available options. The unit is powered by a 100-240 ±10% VAC, 47-63 Hz power supply, and is in a 1 3/4" X 19" X 16" rack mount chassis.



Front and Rear Panels (2483-40311 Four Channel with Options R, W28 shown)

EQUIPMENT SPECIFICATIONS*

Input Characteristics

Impedance/Return Loss **50Ω/14 dB**
 Frequency **220 to 380 MHz (300 ± 80 MHz)**
 Noise Figure, max. **20dB (set to min input, max gain)**
 Input Level range **-30 to -10 dBm**

Output Characteristics

Impedance/Return Loss **50 Ω /12 dB**
 Frequency **970 to 1130 MHz**
 Output Level range **-30 to -10 dBm**
 Output 1 dB compression **+0 dBm, max. gain**

Channel Characteristics

Gain range (adjustable) **0 to +20 dB in 0.5 ± 0.5 dB steps**
 Frequency Response **±1.5 dB, 970 - 1130 MHz; ± 0.5 dB, any 40 MHz increment**
 Spurious **< -50 dBC, in band; < -45 dBC, out of band (0.4-0.96 GHz and 1.14-2.0 GHz)**
 Intermodulation **< -50 dBC for two carriers at 4 MHz spacing, each at -5 dBm out (set to -30 dB input, 20dB gain)**
 Ch to Ch isolation **< -60 dB typ., < -50 dB min.; G=20, -30 dBm input level**
 Group Delay, max **5 ns total, 970 - 1130 MHz out**
 Frequency Sense **Non-inverting**

Synthesizer Characteristics

Frequency Accuracy **± 1.0 ppm max over temp (± 0.01 ppm, option H)**
 Frequency Step **None, fixed tuned**

Phase Noise @ Freq (Hz)	10	100	1k	10k	100k	1M
Specification dBC/Hz	-60	-65	-70	-80	-95	-110
Typical dBC/Hz	-65	-69	-77	-83	-97	-115

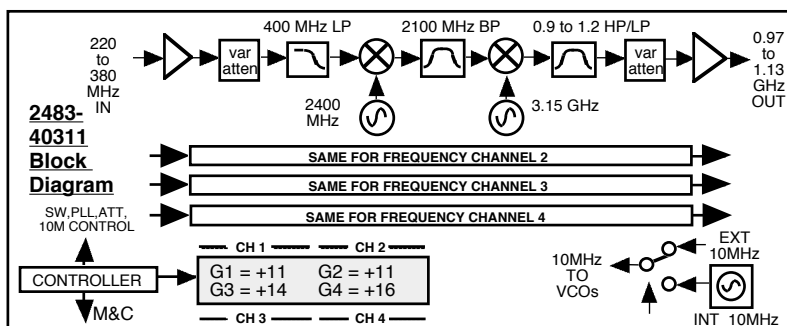
10 MHz Level (In or Out) **3 dBm, ± 3 dB, 75 ohms, works with 50 & 75 Ω**

Controls, Indicators

Freq/Gain Selection **direct readout LCD; manual or remote selection**
 Power; Alarm; Remote **Green LED; Red LED; Yellow LED**
 Remote **RS232C/RS485 selectable, (Ethernet optional)**

Other

RF IN RF OUT Connector **50Ω BNC (female)**
 10 MHz Connectors **75Ω BNC (female), works with 50 & 75 Ω**
 Alarm/Remote Connector **DB9 (female) - NO or NC contact closure on Alarm**
 Size **19 inch, 1RU standard chassis 1.75" high X 16.0" deep**
 Power **100-240 ± 10% VAC, 47-63 Hz, 45 watts max**



Available Options

H - High Stability (±0.01ppm) Int Ref
 R - Redundant Power Supply
 W8 - Ethernet; w/Web Browser (WB)
 W18 - Ethernet; w/WB & SNMP
 W28 - Ethernet; w/TCP/IP, Telnet

Connectors/Impedance

STD - 50Ω BNC (RF OUT), 50Ω BNC (RF IN)
 Bx - 75Ω BNC (RF OUT), 75Ω BNC (RF IN)
 Cx - 50Ω BNC (RF OUT), 75Ω BNC (RF IN)
 Kx - 75Ω BNC (RF OUT), 50Ω BNC (RF IN)
x = # of Channels
Contact Cross for other options

10°C to 40°C; Specifications subject to change without notice