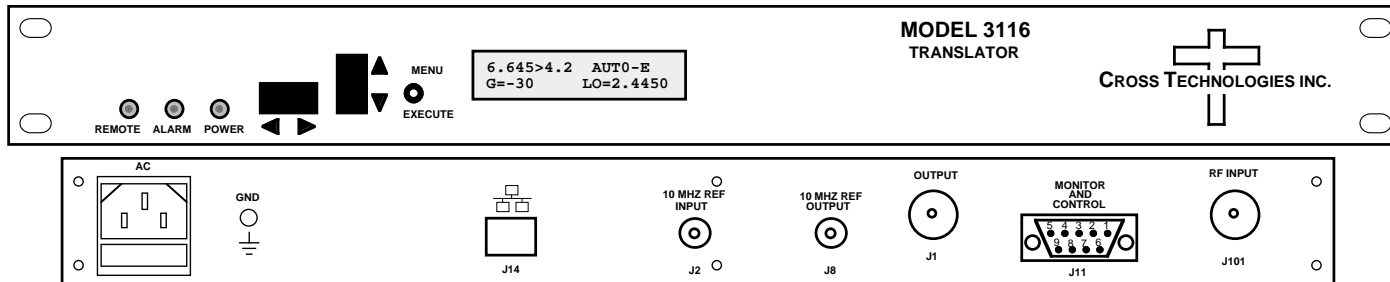


3116-66T42 Translator 5.845-6.645 GHz to 3.40-4.20 GHz

The 3116-66T42 Translator converts 5.845-6.645 GHz to 3.40-4.20 GHz with a 2.445 GHz local oscillator. Front panel LEDs provide indication of Remote operation, PLL Alarm, and DC Power. The RF to RF gain is **-20 to -50 dB**, adjustable in **0.5 ± 0.5 dB steps**. Connectors are N-type female for RF out, RF in and BNC female for external 10 MHz in and 10 MHz out. In AUTO, the 10 MHz reference stays in external if the external level is **+3 dBm, ±3 dB**. Gain and internal 10 MHz frequency are controlled by the **front panel switches** or the M&C connector (**Ethernet optional**). It is powered by a 100-240 ±10% VAC power supply and is in a 1.75" X 19" X 14" rack mount chassis.



3116-66T42 FRONT AND REAR PANELS (Shown with optional Ethernet)

EQUIPMENT SPECIFICATIONS*

Input Characteristics

Impedance/Return Loss **50Ω/12 dB, 14 dB typ**
 Frequency (GHz) **5.845-6.645 GHz**
 Input Level range **-30 to -10 dBm**
 Input 1 dB compression **0 dBm, Gmax.**

Output Characteristics

Impedance/Return Loss **50 Ω /12 dB, 14 dB typ**
 Frequency (GHz) **3.40-4.20**
 Output Level Range **-60 to -30 dBm**
 Output 1 dB compression **-20 dBm, Gmax.**

Channel Characteristics

Gain, maximum **-20 ±3 dB, at Fc**
 Gain Range **-20 to -50 dB; 1±1 dB Steps**
 In to Out Isolation, Min. **>40 dBc, >50 typ.**
 Spurious, Inband **>40 dBc**
 Spurious, out of band **>20 dBc, Fc±1 GHz, > 40 dBc, Fc±2 GHz**
 Spurious, LO **> 20 dBc at the output; <-40 dBm LO out the input;**
2 tone @-35dBm out ea **>50 dBc, Gain=-20**
 Frequency Response **±1.5 dB, 3.40 -4.20 GHz out; ± 0.5 dB, 40 MHz BW**
 Frequency Sense **Non-inverting**

LO Characteristics

LO Frequency **2.445 GHz**
 Frequency Accuracy **± 0.01 ppm max over temp internal reference; ext. ref. input**

Phase Noise @ F (Hz) >	100	1K	10K	100K	1M
dBc/Hz	-70	-80	-85	-100	-110

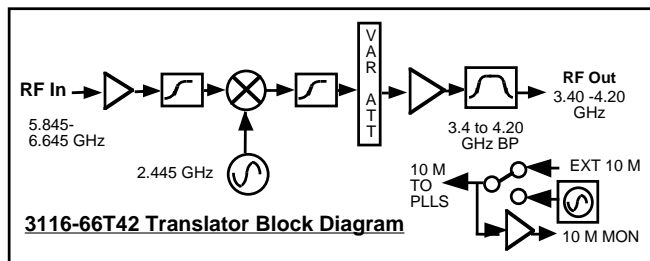
10 MHz In/Out Level **+3 dBm, ±3 dB**

Controls, Indicators

Gain, 10M Freq. Gain and internal 10 MHz frequency, Front Panel Switches or M&C connector (Ethernet Optional).
 PLL Alarm Red LED, External contact closure
 Power Green LED
 Remote RS232C/RS485/422, 9600 baud (**Ethernet Optional**)

Other

RF In, Out, Connectors N-type (female), 50Ω
 10 MHz connectors BNC (female), 75 ohms; Works with 50Ω
 Monitor/Control Conn. RS232C, DB9, Female; **Optional Ethernet, RJ45, Female;**
 Size 19 inch, 1RU standard chassis, 1.75" high X **14" deep**
 Power 100-240 ±10% VAC, 47-63 Hz, 30 watts max



Available Options

W8 - Ethernet; w/Web Browser (WB)
 W18 - Ethernet; w/WB & SNMP
 W28 - Ethernet; w/TCP/IP, Telnet

Connectors/Impedance

SS- 50Ω SMA (RF)

* +10 to +40 degrees C Operating; **-30 to +60 degrees C Non-operating**; 95% relative humidity, non-condensing; Specifications subject to change without notice