2116-6T4 Block Translator, 5.845 - 6.425 GHz to 3.62 - 4.20 GHz

The 2116-6T4 Block Translator converts 5.845 - 6.425 GHz to 3.62 - 4.20 GHz with a local oscillator at 2.225 GHz. Front panel LEDs provide indication of external 10 MHz (yellow), PLL alarm (red), and DC power (green). The gain is -30 dB to Output #1 and -50 to Output #2. Connectors are N-type female for RF and BNC female for the external reference input and reference output. A three-way switch controls which 10 MHz reference is being used. In the INT position, the internal reference is used, in the EXT position, the external reference is used unless a +3 dBm ± 3 dB, 10MHz reference signal is connected to the external reference input. The 2116 is powered by a 100-240 ±10% VAC power supply, and housed in a 1 3/4" X 19" X 14" rack mount chassis.

**EQUIPMENT SPECIFICATIONS**

### Input Characteristics
- Impedance/Return Loss: 50Ω/15 dB
- Frequency: 5.845 to 6.425 GHz
- Input Level range: -10 to -30 dBm
- Input 1 dB compression: 0 dBm

### Output Characteristics
- Impedance/Return Loss: 50Ω/15 dB
- Frequency: 3.62 to 4.20 GHz
- Output Level Range (#1): -40 to -60 dBm
- Output Level Range (#2): -60 to -80 dBm

### Channel Characteristics
- Gain: -30 dB ±2 dB (Output #1); -50 dB ±2 dB (Output #2)
- Input/Output Isolation: 60 dB, min
- Intermodulation: < -50 dBc for two carriers each at -10 dBm
- Frequency Response: ±1.5 dB, over frequency band; ± 0.5 dB, 40 MHz BW
- Frequency Sense: Non-inverting

### LO Characteristics
- LO Frequency: 2.225 GHz
- Frequency Accuracy: ± 0.01 ppm max over temp internal reference; ext. ref. input
- 10 MHz In/Out Level: +3 dBm ± 3 dB

### Controls, Indicators
- Power: Green LED
- PLL Alarm: Red LED, External contact closure
- Ext 10 MHz: Yellow LED, indicates external 10 MHz reference selected (rear panel DPDT switch)
- 10 MHz Reference: 3-way Switch (selects INTERNAL, EXTERNAL, or AUTO mode)

### Other
- RF Connectors: N-type (female)
- 10 MHz Connectors: BNC (female), 50Ω/75Ω
- Alarm Connector: DB9 (female) - NO or NC contact closure on Alarm
- Size: 19 inch standard chassis 1.75" high X 14" deep
- Power: 100-240 ±10% VAC, 47 - 63 Hz, 45 watts max.

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

---

**Available Options**

Connectors/Impedance

- SS - 50Ω SMA (RF)