4116-T300 Ka-band Translator, Weather Resistant*

The 4116-T300 Ka-band Translator converts 27.5 - 31.0 GHz to 17.7 - 21.2 GHz in four selectable fixed bands and to 2.5 - 6.0 GHz for monitoring purposes. LEDs provide indication of DC Power, and PLL Alarms. The maximum gain is +20 dB. Connectors are 2.92mm for the RF In and RF Monitor, Super SMA for the RF Out, Type N for the C-band monitor, and SMA (all female) for the external reference input and output. Gain, band select, and internal 10 MHz frequency are controlled by the M&C (Ethernet and/or Status/Control) Connectors. In AUTO, the 10 MHz reference stays in external if the external level is in the ±2 to +8 dBm range. The 4116-T300 is powered by a 100-240 ±10% VAC power supply and mounted in an 8" Wide X 6" High X 16" Deep, Weather Resistant* enclosure.

EQUIPMENT SPECIFICATIONS**

- **Input Characteristics**: Impedance/Return Loss 50Ω/14 dB, Frequency SEE BAND CHART, Noise Figure, Max. 20 dB max gain, Input Level range -40 to -15 dBm, Gain, Band, 10M Freq. Gain, band select, and internal 10 MHz frequency via Ethernet M&C or Status/Control connector.
- **Output Characteristics**: Impedance/Return Loss 50Ω/14 dB, Mute & UnMute SEE BAND CHART, Frequency (GHz) Output Level Range -15 to 0 dBm, Output 1 dB compr. +10 dBm, max. gain Mute >60 dB @ 0 dBm output.
- **Channel Characteristics**: Gain at Fc +20 ±3 dB, (+20 to -10 dB variable in 1 dB steps), Input to output isolation >60 dB, min. (at max gain and 0 dBm out), Spurious, Inband <-50 dBm, signal independent; fc ± 2 GHz, Spurious, Out of band <50 dBm, measured at the input; <25 dBm, measured at the output, Intermodulation <2 dB, over RF band; ±0.5 dB, 40 MHz BW, Frequency Response ±2 dB, over RF band; ±0.5 dB, 40 MHz BW, Frequency Sense Non-inverting.
- **LO Characteristics**: LO Frequency Band Specific, 8.3 to 10.3 GHz translation range, 5 MHz steps, Frequency Accuracy ±0.05 ppm max over temp internal reference; ext. ref. input 38°C/°C 100 1K 10K 100K 1M 125 19.2

- **Power; PLL Alarm**: Green LED; Red LED, External Contact Closure.
- **Controls, Indicators**: Gain, Band, 10M Freq. Gain, band select, and internal 10 MHz frequency via Ethernet M&C or Status/Control connector.
- **Additional Connector** Specifications: RF In, RF Monitor 2.92mm (40 GHz) Female, 50Ω, RF Out Super SMA, (27 GHz) Female, 50Ω, C-Band Type N (Female) 50Ω, 10 MHz SMA (Female) 50Ω.

**+0 to +50 degrees C; Specifications subject to change without notice.

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*Weather Resistant enclosures are designed to be water resistant for installation in an outdoor enclosure or antenna hut or mounted outdoors on an antenna assembly at their specified temperature ranges. They are designed to be located "out in the elements" (water, sleet, snow, etc.) but they are not designed to be "submerged under" water.

If an extended temperature range is required, there is an Extended Temperature option (Option W21: -30°C to +60°C) available at an additional cost. Contact Cross for quote.

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