2009-2425-1750 Downconverter, 2.40 - 2.50 GHz to 1700 - 1800 MHz

The 2009-2425-1750 Downconverter converts a 2.40 - 2.50 GHz signal to 1700 - 1800 MHz with a low side local oscillator (LO) (non-inverted spectrum). Featuring low phase noise and high stability, this unit down converts 2.40 - 2.50 GHz signals to 1700 - 1800 MHz. The 2.40 - 2.50 GHz input is mixed with a synthesized local oscillator (LO) signal to 1700 - 1800 MHz. The mixer output is applied to the output amplifier providing a nominal gain of +10 dB. Connectors are 75Ω type-F (female) for the 1700 - 1800 MHz output and 50Ω type-N (female) for the RF input. Front panel LEDs light when DC power is applied (green) and when a PLL alarm occurs (red). DC power is provided by the LNB voltage from the receiver under test or by an external wall mount power supply (option -P4). The 2009 can be mounted on an 1 3/4” X 19” rack mount panel (option -R).

**EQUIPMENT SPECIFICATIONS**

**Input Characteristics**
- Impedance / Return Loss: 50Ω / 12 db
- Frequency: 2.40-2.50 GHz
- Level: -40 to -20 dBm

**Output Characteristics**
- Impedance / Return Loss: 75Ω / 12 db
- Frequency: 1700 to 1800 MHz
- Level: -30 to -10 dBm

**Output 1 dB compression**: 0 dBm

**Channel Characteristics**
- Gain at band center: +10 dB ±2 dB
- Spurious Response: <=-40 dBc, 1700-1800 MHz out
- Spectrum Sense: Non-inverting
- Frequency Response: ± 2 dB, 1700-1800 MHz; ± 0.5 dB, any 10 MHz increment

**Synthesizer Characteristics**
- LO Frequency: 0.700 GHz
- Frequency Accuracy: ± 1.0ppm max

**Indicators**
- DC Power: Green LED
- Alarm: Red LED

**Other**
- RF In Connector: Type-N (female), 50Ω
- IF Out Connector: Type-F (female)
- Size, Bench Top: 4.7” wide X 1.75” high X 6.5” deep
- Size, Rack Mount (-R): 19” standard chassis, 1.75” high X 7.0” deep (optional)
- Power: +15 to +18 VDC, 250 ma on RF Out (Wall mount power supply unit optional)

**Options**
- -M: Type N RF, 50Ω BNC L-band out
- -P4: 100-240 ± 10% VAC Wall Power Supply, +15 VDC
- -R: 1RU Rack Mounting
- -C: Power Supply not included. Requires Cross 2000-01 Power Supply

*+10˚C to +40˚C; 2000 meters max elevation; 80% max humidity; Specifications subject to change without notice.