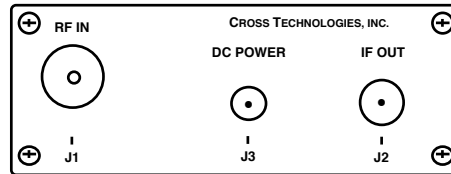
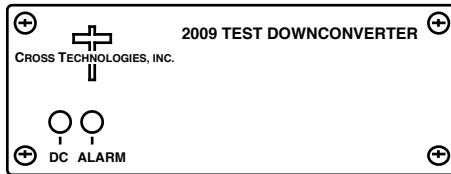


2009-2425-1750 Downconverter, 2.40 - 2.50 GHz to 1700 - 1800 MHz

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**).



Front and Rear Panels

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

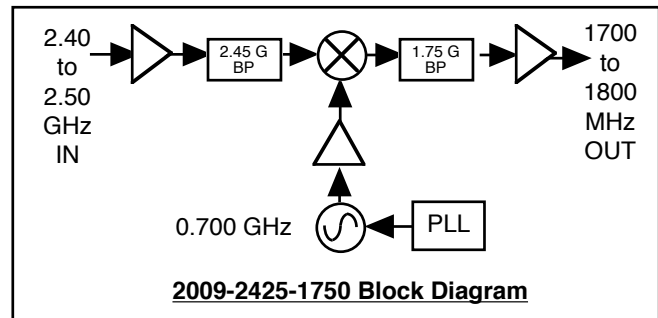
Channel Characteristics

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

Phase Noise @ F (Hz) >	100Hz	1kHz	10kHz	100kHz	1MHz
dBC/Hz	-60	-75	-85	-100	-110



2009-2425-1750 Block Diagram

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.