The 2009-58 Downconverter converts a 5.85 - 7.05 GHz signal to 950 - 2150 MHz with a low side local oscillator (LO) (non-inverted spectrum) for loop-back applications. This unit is used to down convert “clean” (having only this frequency) 5.85 - 7.05 GHz signals to 950 - 2150 MHz for test purposes. The 5.85 - 7.05 GHz input is amplified and mixed with a synthesized local oscillator (LO) signal to 950 - 2150 MHz. The mixer output is applied to the output amplifier providing a nominal gain of +25 dB. Connectors are 50Ω type-N (female) for the RF input and 75Ω type-F (female) for the 950 - 2150 MHz output. 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 -P or -P4). The 2009 can be mounted on an 1 3/4” X 19” rack mount panel (option -R).