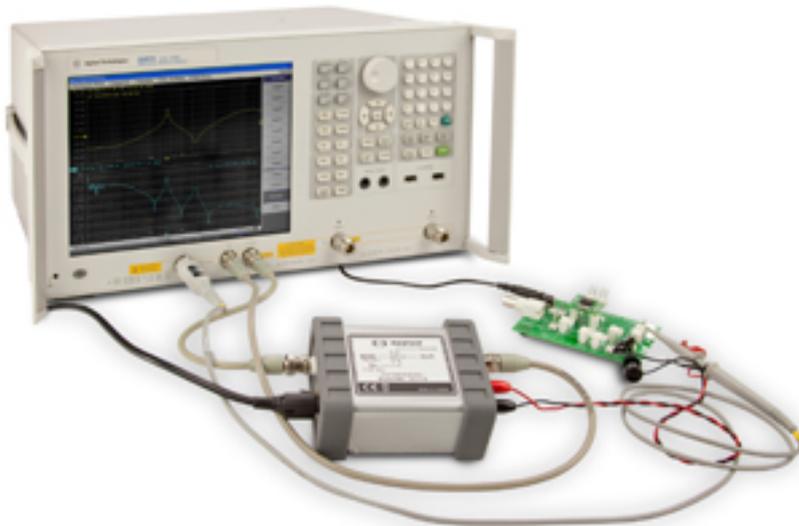


Test interface adapters improve power supply, noise, EMI, and PDN testing accuracy



Picotest.com has released three new Signal Injectors, adding to its already industry leading lineup of test adapters. The three new Signal Injectors include the J2180A 0.1Hz -100MHz Ultra Low Noise Preamplifier (now with CE Approval), the J2102A Common Mode Transformer (PDN, ground loop), the J2112A High Current Output (1A) Current Injector and the J2190A 0.1Hz-10Hz Active Filter.

The new Signal Injectors, also known as test interface adapters, greatly improve power supply, noise, EMI, and PDN testing accuracy. The Signal Injectors work with network analyzers, real-time spectrum analyzers, and oscilloscopes, from all manufacturers.

The J2180A low noise preamplifier provides a fixed, AC coupled 20dB gain while converting a 1M Ω input impedance to a 50 Ω output impedance. With a 3dB bandwidth of 0.1Hz to 100MHz, the preamplifier improves the sensitivity of oscilloscopes, network analyzers and spectrum analyzers while reducing the effective noise floor and spurious response. The preamplifier can also serve as a low frequency DC blocker for a spectrum analyzer. The J2180A preamplifier offers very low noise, fast 100V/ μ S slew rate for pulse applications and very low distortion for audio applications.

Another useful feature of the J2180A is that it can be used to connect a high input impedance oscilloscope probe to 50 Ω equipment. This is particularly useful for Real-Time Spectrum Analyzers and specialized oscilloscopes like the Tektronix

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MDO4000.

The simplest and most effective method for eliminating a ground loop is to add a wideband common mode transformer to the measurement, such as the Picotest J2102A Common Mode Transformer. The transformer for a low impedance PDN measurement must have very wide bandwidth, low loss and tight coupling; otherwise, the results will not be accurate over the measured frequency range. It is also important to maintain the 50 Ohm transmission line impedance through this transformer. The J2102A accomplishes this with ease.

The J2112A is a higher current version of the most popular injector, the J2111A Current Injector. The J2112A offers more current (1A vs. 50mA for the J2111A) while maintaining the 20nS rise/fall times and 40MHz bandwidth. The J2112A is used for fast and accurate (better than 1uA resolution) transient load stepping and profiling, as well as output impedance and non-invasive phase margin measurement. It is superior to electronic loads in many respects including its speed, accuracy and much lower capacitive loading.

The J2190 is an Active Filter with a 4th order high pass and a 4th order low pass combination in fully analog form for ultra low noise. The filter is cascadable for sharper cutoffs.

The J2180A, J2112A, J2102A, and the J1290A are available for immediate purchase.

www.Picotest.com [1]

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