VM7510

DC Reference Standard

Features

- Precision dc reference facilitates digitizer calibration
- On-board programmable switch reduces need for external system cabling
- Simplified programming using word-serial commands
- Programmable polarity for dc reference
- Mix/match with up to two VMIP series instruments in a single VXI slot

The VM7510 is a precision dc voltage standard which is designed to be used in conjunction with high-performance digitizers, such as the VM2601 family, to facilitate calibration with a test system. The VM7510 provides a precision +/- 0.5 V signal which can be used as the dc reference during calibration to provide a higher level of accuracy than typical specifications. An on-board precision switch provides the flexibility to allow users to select between the measurement input, the internal dc source, or an external ac calibration source without the need for external signal routing or cabling.

As part of VTI's VMIP series of modular instruments, the VM7510 can be combined with up to two other measurement or stimulus functions to provide a flexible high-performance instrument in a single "C"-size VXI slot. For example, the VM7510 can be integrated with the VM2601, 80 MSa/s digitzer and VM2164, 200 MHz dual counter/timer on a VM9000 carrier, to provide a versatile, high-performance measurement system on a standard VXI module.

Ordering Information VM7510 DC reference standard







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Block Diagram



General Specifications

SIGNAL INPUT AND AC REFERENCE INPUT		DC REFERENCE	DC REFERENCE	
Insertion Loss	< 0.2 dP	Output Voltage	+1.000 V, 0.000 V, or -1.000 V into a high impedance load	
500 MHz	< 0.5 dB		+0.500 V, 0.000 V, or -0.500 V into a 50 Ω load	
Isolation		Output Impedance	50 Ω	
10 MHz	< -80 dB	Output Drive	> 100 mA	
100 MHz	< -70 dB	Output Accuracy	±100 μV all output settings,	
500 MHz	< -65 dB		into high impedance	
VSWR 100 MHz	< 1.2:1	Output Adjustment	±5.0 mV all output settings, into high impedance. Front panel accessible multi-turn potentiometer.	
		Temperature Stability	25 ppm/°C	
		Long Term Stability	50 ppm/yr	
		Rront Panel Connector	SMB (x3)	
100 MHz	< 1.2:1	Temperature Stability Long Term Stability Rront Panel Connector	impedance. Front panel accessible multi-turn potentiometer. 25 ppm/°C 50 ppm/yr SMB (x3)	

All information and specifications subject to change without notice.

