

# 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  $\pm 0.5$  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 digitizer and VM2164, 200 MHz dual counter/timer on a VM9000 carrier, to provide a versatile, high-performance measurement system on a standard VXI module.

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### Ordering Information

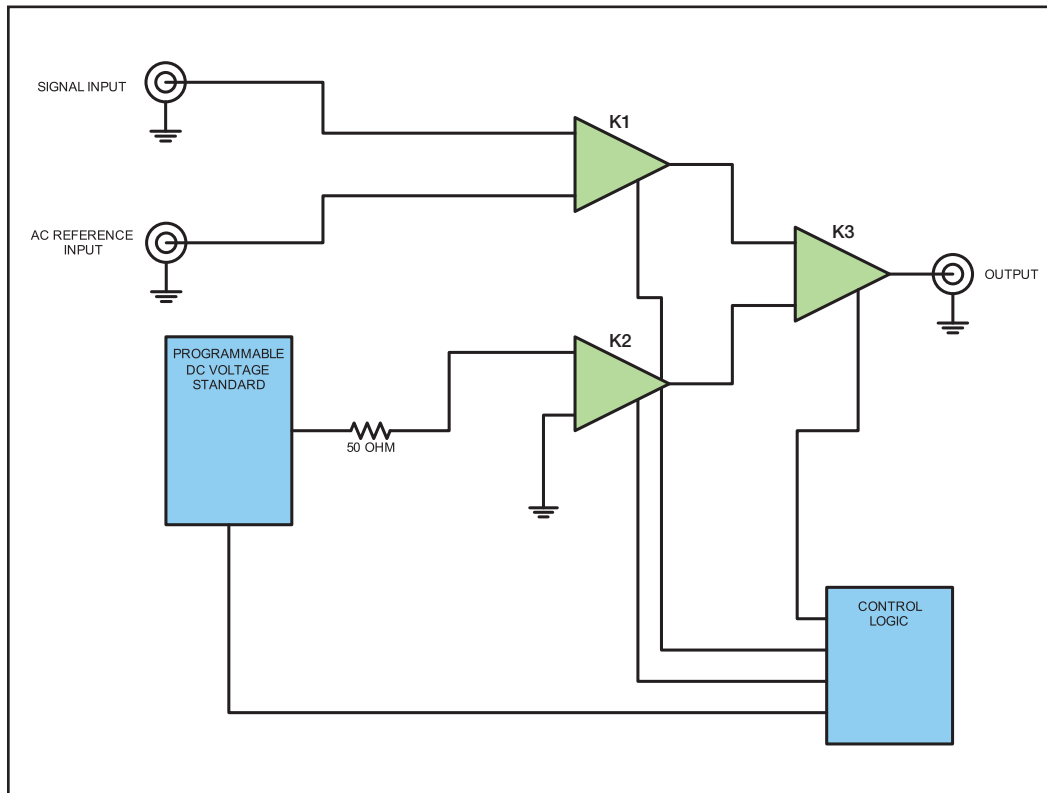
VM7510

DC reference standard

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Block Diagram



## General Specifications

### SIGNAL INPUT AND AC REFERENCE INPUT

#### Insertion Loss

100 MHz	< 0.2 dB
500 MHz	< 0.5 dB

#### Isolation

10 MHz	< -80 dB
100 MHz	< -70 dB
500 MHz	< -65 dB

#### VSWR

100 MHz	< 1.2:1
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### DC REFERENCE

#### Output Voltage

+1.000 V, 0.000 V, or -1.000 V into a high impedance load

+0.500 V, 0.000 V, or -0.500 V into a 50 Ω load

#### Output Impedance

50 Ω

#### Output Drive

> 100 mA

#### Output Accuracy

±100 μV all output settings, into high impedance

#### 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

#### Front Panel Connector

SMB (x3)

All information and specifications subject to change without notice.

Precision Modular Instrumentation

