**XITRON’s 1594 Multiplexing Differential Voltmeter**

The 1594 Multiplexing Voltmeter is a UL Inter Wire Compliance Tester that brings flexibility and precise measurement to the production line.

**Specifications**
- Low Cost/High Performance
- Measures and displays true RMS or peak voltage as selected by user
- Measurement range 1.5Vpk to 1500Vpk (1Vrms to 1000Vrms)
- Measurement accuracy better than 0.5% + 0.25V + 0.015%/kHz for AC
- Graphics Display shows numerical results
- PLC Printer output, IEEE488 interface

**Industries Served**
- Lighting
- Consumer Products
- Regulatory Agencies

**Features**
- Accurate measurement with a range of voltages from 1.5Vpk to 1500Vpk. Up to 16 inputs may be provided to the 1594, which measures the differential RMS and peak voltage between each possible pair formed between these connections. The six-key front panel simplifies the selection of measurements.

The 1594 provides the user with numerical results of these measurements on an easy-to-read front panel or printout on any PCL compatible printer. Optionally, the 1594 can be controlled by a computer and the measurement results can also be read by the computer. If a few connections are measured, then a front panel display can easily be used to determine the results. If a large number of connections are to be measured, then the user may wish to use the printout.

The user may choose to store up to 29 different wiring configurations in the 1594. One of several color designations, indicates the input to be measured. Measurement results of this input are indicated by a designated color choice on-screen or in the printout.

Generally, there are a few commonly used connection configurations. The user should store these configurations in different wiring numbers. In this way, these configurations can be recalled from the non-volatile memory of the 1594 without the chance of entry errors.
**Temperature & Humidity**

*Operating:* 0°C to 45°C, < 85% RH @ 40°C non-condensing

*Storage:* -30°C to 65°C, < 95% RH @ 40°C non-condensing

**Size & Weight**

*Size:* (HxWxD) 4.5" x 11.5" x 10.5"

*Weight:* 6lbs. (2.7kg)

**Power Input**

*Voltage:* 80-265 VRMS autoselect

*Frequency:* 50/60/400 Hz Ω100 VA max

**Binding Post Signal Terminals**

All pins are loaded by nominally 1Mohm in parallel with less than 5pF to ground (excluding external wiring capacitance) at all times

**Measurements**

*All measurements are true RMS or Peak as selected by user*

**Measurement Range**

Measurements are made of voltages in the range 1.5Vpk to 1500Vpk (1Vrms to 1000Vrms)

**Measurement Accuracy**

The accuracy of measurements is better than 0.5% + 0.25V + 0.015%/kHz for AC measurements below 100kHz. Add 0.5V for DC coupled measurements, add 0.5V for all peak measurements

**Relay Switching**

All switching is solid state

**NOTE:** Specifications subject to change without notice

**Digital Interfaces (standard)**

IEEE488

Parallel: IEEE1264, unformatted text or PCL

**Warranty**

Two years

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**Quality and Reliability**

XITRON Technologies, founded in 1990, is the premier source of precision power testing and measurement instruments for industrial manufacturing and medical electronics. Using the latest digital signal processing and circuitry, XITRON’s sophisticated technology gives our customers the edge in design verification and product manufacturability. XITRON is ISO 9001:2000, EN46001 registered, and FDA (GMP 820) compliant.

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**Ordering Information**

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**Condensed Specifications**

(Contact XITRON for complete specifications)

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**Part Number**

1594B