1-7. SPECIFICATIONS

AS A DIFFERENTIAL VOLTMETER

DC ACCURACY. ±(0.0025% of input + 0.0001% of range + 5 uv) from 0 to ±1100 vdc at 23° C. (nominal calibration temperature), less than 70% relative humidity. ±(0.005% of input + 5 uv) from 0 to ±1100 vdc within 16° C to 32° C (60° F to 90° F) temperature range, less than 70% relative humidity. Derate accuracy outside this temperature range at 0.00035%/C to extremes of 0° C and 50° C (32° F and 122° F).

NOTE. Thorough error analysis studies were made into total instrument stability taking into account the documented stabilities of individual components and utilizing probability and statistical methods. These studies indicate that typical instrument stability defined as a specification met by 80% to 90% of all instruments) is 20 ppm (0.002%) peak-to-peak per year. An instrument so categorized need be calibrated only once per year to meet all specifications. Additional stability data upon request.

VOLTAGE RANGES. 1, 10, 100, 1000 vac and dc, with 10% overranging capability on each range.

NULL RANGES. 100 uv through 100 v end scale ac and dc, in seven ranges.

DC INPUT RESISTANCE. Infinite at null from 0 to ±11 vdc. 10 megohms above ±11 vdc.

METER RESOLUTION. 1 ppm of range (1 uv maximum).

VOLTAGE DIAL RESOLUTION. 1 ppm of range (1 uv maximum).

AC ACCURACY. At 23° C ±1° C (nominal calibration temperature) relative humidity less than 70%

INPUT VOLTAGE	FREQUENCY		
	30Hz to 5KHz	5KHz to 10KHz	10KHz to 20KHz
.001 to 500V	±(0.05% of input +0.0025% range)	±(0.07% of input +0.005% range)	±(0.15% of input +0.01% range)
500V to 1100V	±0.1% of input	±0.1% of input	±(.15% of input +0.01% range)

Temperature range 13° C to 35° C (55° F to 95° F) relative humidity less than 70%

INPUT VOLTAGE	LOW FREQUENCY		BASIC FREQUENCY		HIGH FREQUENCY		
	5Hz - 10Hz	10Hz - 20Hz	20Hz - 5KHz	5KHz - 10KHz	10KHz - 20KHz	20KHz - 50KHz	50KHz - 100KHz
.001 - 1100V	±(1% of input +25 uv)	±(0.3% of input +25 uv)	±(0.1% of input +25 uv)	±(0.15% of input +25 uv)			
0.1 - 1100V					±0.3% of input		
0.1 - 110V						±0.5% of input	±1% of input

Outside the 13° C to 35° C temperature range the above specifications may be derated at 0.003%/° C (below 5 KHz) or 0.005%/° C (above 5 KHz) to the extremes of 0° C to 50° C (32° F to 122° F)

AS A CONVENTIONAL VOLTMETER

AC ACCURACY. ±3% of range within frequency and voltage ranges listed under "ac accuracy as a differential voltmeter."

DC ACCURACY. ±3% of range.

RANGE

VOLTAGE RANGE	DC INPUT RESISTANCE	AC INPUT IMPEDANCE
1000-0-1000	10 MEG	1 MEG 40 Pf
100-0-100	10 MEG	1 MEG 40 Pf
10-0-10	10 MEG	1 MEG 40 Pf
1-0-1	10 MEG	1 MEG 40 Pf
*.1-0-.1	10 MEG	1 MEG 40 Pf
*.01-0-.01	10 MEG	1 MEG 40 Pf
*.001-0-.001	1 MEG	1 MEG 40 Pf
*.0001-0-.0001	1 MEG	1 MEG 40 Pf

NOTE. 10% overvoltage capability on each range.
* These ranges obtained by using null ranges with all voltage readout dials set to zero.