# SPECIFICATIONS

### AS A VOLTMETER:

RANGE: .01 volt full scale to 10 volts in seven 1x and 3x ranges.

ACCURACY: ±2% of full scale on all ranges exclusive of noise and drift.

ZERO DRIFT: Less than 2 millivolts per 24 hours, less than 200 microvolts per <sup>OC</sup>, after 30-minute warm-up.

INPUT IMPEDANCE: Greater than 10<sup>14</sup> ohms shunted by 20 picoferads. Input resistance may also be selected in decade steps from 10 to 10<sup>77</sup> ohms.

#### AS AN AMMETER:

R.ANGE: 10<sup>-13</sup> ampere full scale to 0.3 ampere in twenty-six 1x and 3x ranges.

ACCURACY: ±3% of full scale on 0.3 to 10<sup>-10</sup> ampere ranges using the smallest available multiplier setting; ±5% of full scale on 3 x 10<sup>-11</sup> to 10<sup>-13</sup> ampere ranges.

METER NOISE: Less than \$10-14 ampere.

OFFSET CURRENT: Loss than 2 v 10-14 ampere

#### AS AN OHMMETER:

RANGE: 1000 ohms full scale to 1013 ohms in twenty-one linear 1x and 3x ranges.

ACCURACY: ‡4% of full scale on 1000 to 108 ohm ranges using the largest available multiplier setting; ‡5% of full scale on 3 x 108 to 1013 ohm ranges.

## AS A COULOMBMETER:

RANGE: 10-12 coulomb full scale to 10-6 coulomb in thirteen 1x and 3x ranges.

ACCURACY: \$5% of full scale on all ranges. Drift due to offset current does not exceed 2 x 10-14 coulomb per second.

## AS AN AMPLIFIER:

INPUT IMPEDANCE. Cloutor than 1014 shims shunted by 20 picofarads. Input resistance may also be selected in decade steps from 10 to 1011 ohms.

OUTPUTS: Unity-gain output and either voltage or current recorder output.

VOLTAGE RECORDER OUTPUT: ±1 volt for full-scale input. Internal resistance is 910 ohms. Output polarity is opposite input polarity.

Gain: 0.1, 0.33, etc., to 100.

Frequency Response (within 3 db): dc to 20 kHz at a gain of 1 and decreasing to 1 kHz at maximum gain.

Full output response immed to 1 kHz.

Noise: Less than 10 millivoits rms referred to output.

CURRENT RECORDER OUTPUT: ±1 milliampere for full scale input, variable ±5% with 1400-ohm recorders.

UNITY-GAIN OUTPUT: At dc, output is equal to input within 25 ppm, exclusive of noise and drift. Up to 0.1 milliampere may be drawn. Output polarity is the same as input polarity.

#### **GENERAL:**

POLARITY: Meter Switch selects left-zero (positive or negative) or center-zero scales. Output polarity is not reversed.

CONNECTORS: Input: Teflon-insulated UHF Type. Outputs: Berrier Strip.

BATTERY CHECK: Condition of all batteries may be checked with front panel controls.

BATTERIES: Four 2N6 (or 246, VS305, NEDA 1602); one RM-1W. 700-hour battery life

DIMENSIONS, WEIGHT: 10-1/4" high x 6-1/2" wide x 6-1/2" deep: net weight, 7-1/4 pounds.

ACCESSORIES SUPPLIED: Mating input connector.

