

# Specifications

## Power requirements:

105-125 volts, 60-400 cps ac.  
55 watts nominal.

Size: 19½ x 9½ x 16½ in.

Weight: 42 lb (approximately).

## Filament voltages (ac):

0-119.9 volts in 0.1-volt steps.

## Filament voltages (dc):

0-50 volts in 0.1-volt steps.

## Plate and screen voltages:

10-250 vdc, regulated, in 10-volt steps.  
Manually adjustable auxiliary supply 0 to 300 vdc.

## Fixed bias voltages:

0-100 volts in 0.1-volt steps.

## Self-bias resistances:

10-71,100 ohms in 10-ohm steps.

## Mutual conductance ranges (full scale):

500-26,000  $\mu$ mhos, in 100- $\mu$ mho steps.  
500-128,000  $\mu$ mhos, in 500- $\mu$ mho steps.

## Signal voltage (line frequency):

222 mv, regulated.

## Current range (full scale):

100-5200  $\mu$ a, in 100- $\mu$ a steps.  
100  $\mu$ a to 512 ma, in 2-ma steps.

## Heater-cathode leakage sensitivity:

Reject values from 10-150  $\mu$ a, depending on tube type.

## Tube Testing Methods:

Fixed bias mutual conductance for amplifier tubes.  
Self bias mutual conductance for amplifier tubes.  
Special mutual conductance for heptodes.  
"Knee" test for power pentodes.  
Zero bias plate current and high bias cut-off plate current for computer tubes.  
Full-wave and half-wave tests under load for rectifiers.  
High and low current tests for voltage regulators.  
Many special tests.  
Dual tests on identical triodes or diodes with a single card.

**Accuracy:** Within 1 to 3% of recognized standards for transconductance and plate current measurements.

**Number of tubes:** Eight.

## Protective features:

Five overload devices.  
Accidental operation of Cardmatic switch with no card inserted opens all circuits.

## Sockets:

4, 5, 6, 7, and 9-pin Jumbo.  
Octal, loctal.  
7 and 9-pin miniature.  
7-pin inline and octal subminiature.  
Special socket adapters are available for new types.

## Interelectrode short sensitivity:

1 megohm; special high-sensitivity test, 10 megohm.

## Voltage drop tests:

Meter ranges from 5-300 volts in 1-volt steps (half-scale values).  
Load resistance from 10 to 71,100 ohms, in 10-ohm steps.  
Rated loads on rectifier tubes up to 200 ma.

## Cardmatic switch:

Contacts rated at 10 amperes at 0.0025 ohms contact resistance.  
186 contacts.  
Approximately 2 x 10<sup>50</sup> switching possibilities.