

**Model 261**  
**Picoampere Source**

Revised 1/16/89

**OUTPUT:**  $10^{-14}$ A ( $10^{-11}$ A full range) to  $1.1 \times 10^{-4}$ A, positive or negative, in eight decade ranges.

**ACCURACY:** Exclusive of input drop consideration:

RANGE SETTING		SPAN, AMPERE	ACCURACY WITH 10.00 SETTING (10V SOURCE VOLTAGE)	WORST-CASE WITH SETTING OTHER THAN 10.00*
$10^{-7}$ to $10^{-5}$	$10^{-7}$ to $1.1 \times 10^{-4}$		$\pm 0.25\%$	$\pm 0.25\%$
$10^{-8}$	$10^{-8}$ to $10^{-7}$		$\pm 0.5\%$	$\pm 0.5\%$
$10^{-9}$	$10^{-9}$ to $10^{-8}$		$\pm 0.6\%$	$\pm 0.8\%$
$10^{-10}$	$10^{-10}$ to $10^{-9}$		$\pm 0.6\%$	$\pm 1.1\%$
$10^{-11}$	$10^{-11}$ to $10^{-10}$		$\pm 0.6\%$	$\pm 1.3\%$
$10^{-12}$	$10^{-12}$ to $10^{-11}$		$\pm 0.7\%$	$\pm 1.6\%$
$10^{-12}$	$10^{-14}$ to $10^{-12}$		—	$\pm 2.0\%$

\*All accuracies are  $\pm$  the percentage given,  $\pm 0.01 \times$  range switch setting.

**LONG-TERM STABILITY:** Will operate within stated specifications for three months after calibration. After three months add 0.15% per month to  $10^{-8}$  through  $10^{-12}$ A range setting accuracy specifications.

**TEMPERATURE COEFFICIENT:**  $\pm 0.1\%/^{\circ}\text{C}$  from  $15^{\circ}\text{C}$  to  $30^{\circ}\text{C}$  on  $10^{-7}$  to  $10^{-5}$ A range settings. Approximately  $0.15\%/^{\circ}\text{C}$  on  $10^{-12}$  to  $10^{-8}$ A range settings. Exact values for these ranges supplied with instrument.

**WARM-UP TIME:** 1 hour.

**LINE REGULATION:** 0.01% for 10% change in line voltage.

**SOURCE VOLTAGE:** 0 to 11V in 0.01V steps.

**RESOLUTION:** 3 significant figures from  $10^{-12}$ A to  $1.1 \times 10^{-4}$ A.

**RANGE RESISTORS:**  $10^5$  to  $10^{12}\Omega$  in decade steps;  $\pm 5\%$ .

**RANGE RESISTOR ACCURACY:** Value with power on, given on certificate.

$\pm 0.5\%$ :  $10^8$  to  $10^{12}\Omega$

$\pm 0.1\%$ :  $10^7$  to  $10^6\Omega$

$\pm 0.02\%$ :  $10^5\Omega$ .

**OUTPUT ISOLATION:** Low to ground:  $>10^9\Omega$  shunted by 0.001 $\mu\text{F}$ .

**CERTIFICATION:** A Calibration Certificate is furnished including range resistor values, thermal coefficients, temperature and date of calibration. Certification traceable to the National Institute of Standards and Technology is also available.

**POWER:** 105-125V or 210-250V (switch selected), 50-60Hz, 6W.

**DIMENSIONS, WEIGHT:** 155mm high  $\times$  225mm wide  $\times$  300mm deep (6.25 in.  $\times$  9 in.  $\times$  12 in.).  
 Net weight 4.1kg (9 lbs.).

**ACCESSORY SUPPLIED:** Model 2611 Test Cable.