1.3 Specifications

OUTPUT CHARACTERISTICS

VOLTAGE RANGE

Main Output: 0 to ±11.1110 volts at front terminals

Auxiliary Output: 0 to ±111.110 millivolts at rear panel terminals

CURRENT CAPABILITY – MAIN OUTPUT

0 to 50 milliamperes - source. Short-circuit proof. No restrictions on load capacitance.

0 to 3 milliamperes - sink.

ABSOLUTE ACCURACY (at 23°C)

50 PPM of reading, ±50 μV; includes 6-month stability and linearity; main output

150 PPM of reading, ±0.5 μV; includes 6-month stability and linearity; auxiliary (rear-panel) output

LONG-TERM STABILITY:

±15 PPM, 60 days

LINEARITY:

within ±25 PPM

TEMPERATURE COEFFICIENT:

2 PPM/°C

RESOLUTION:

Main Output: 100 microvolts (5 dialable, in-line digital decades, and ±1 mV vernier)

Auxiliary: 1 microvolt

OUTPUT IMPEDANCE

Main Output:

DC: 10 milliohms (max)

Dynamic: $L \leqslant 10\,\mu H$; $R = 2\Omega$

Auxiliary Output:

DC: 100 ohms

NOISE:

Main Output: (0.001% of reading + 50 μV) p-p

SETTLING TIME

V < 300 milliseconds

ISOLATION

Output may be floated up to 500 VDC (maximum) above or below chassis ground.

WARMUP TIME

Less than 10 minutes to rated accuracy. For reduced accuracy of ±0.02%, no warmup time is required.

RECALIBRATION INTERVAL

6 months, for rated performance

TEMPERATURE RANGE

Operating: 0° to +60° C
Storage: -25° to +85° C

HUMIDITY

0-85% RH, non-condensing

POWER REQUIREMENTS

117/234 VAC, 47-420 Hz. 10 W max. (RF filter included)

DIMENSIONS

3-1/2"H x 8-1/2"W x 12"D (Adapter for 19" rack mounting available as an option.)
(89mm H x 216mm W x 305mm D; Adapter = 483mm)

CONSTRUCTION

The AN3100 is housed in a bench-mounting, 3-1/2"H x 8-1/2"W x 12"D, aluminum-alloy case equipped with carrying handle. The five voltage decades are controlled by front-panel knobs.