

VI-700 Series

Various features and options make the VI-700 an effective choice for many manual and programmable voltage and current applications.

- Voltage output range of 100 μ V to 20 V or 200 V
- Current output range of 0.1 μ A to 20 mA or 200 mA
- 3½ digit resolution, 0.75 LSD accuracy
- Manual thumbwheel operation or programmable digital input, IEEE-488 or parallel BCD interface.
- Optional portable power pack
- May be used as a component in a closed loop control system

Improved specifications



Model VI-700 Precision Voltage and Current Source

SPECIFICATIONS

| Voltage | |
|------------------|---|
| Output Ranges | 200 mV, 2 V, 20 V; (200 V with HV option). |
| Resolution | 100 μ V, 1 mV, 10 mV; (100 mV with HV option). |
| Accuracy | \pm (75 ppm + 50 μ V); 200 mV range; \pm (75 ppm + 0.25 mV), 2 V range; \pm (75 ppm + 2.5 mV), 20 V range; at 23°C, no load, after warmup. |
| Output Current | 70 mA, (200 mA with HP option) maximum load up to 20 V; (10 mA for 200 V range with HV option); with LED overload indicator. |
| Output Impedance | 5 m Ω typical, 40 m Ω for 20 V range. |
| Noise and Ripple | 50 μ Vrms on 200 mV and 2 V ranges; 50 μ Vrms on 200 mV and 2 V ranges; 100 μ Vrms on 20 V range. |
| Tempco | \pm 10 ppm/°C typical; \pm 15 ppm/°C max. |

| Current | |
|-------------------------|---|
| Output Ranges | 200 μ A, 2 mA, 20 mA, 200 mA (with HI option). |
| Resolution | 0.1 μ A, 1 μ A, 10 μ A; 100 μ A (with HI option). |
| Accuracy \pm (75 ppm) | + .05 μ A); 200 μ A; \pm (75 ppm + 0.25 μ A), 2 mA; \pm (75 ppm + 2.5 μ A), 20 mA; 23°C, no load. |
| Compliance Voltage | 0-20 V; with LED overload indicator. |
| Noise | 8-20 nA. |

| General | |
|--------------------|---|
| Digital Input | 3½ digit parallel BCD or IEEE-488 interface; a front panel push-button selects REMOTE or LOCAL operation. |
| Isolation | Floating outputs, optically isolated from digital inputs; voltage and current out- puts may be used in either polarity. |
| Power Requirements | 105-125 V or 210-250 V; 50-60 Hz; 5 W. |
| Dimensions | 21.6 cm W x 12.6 cm H x 22.9 cm D (8.5" x 2.8" x 9.0") for Standard Model; 21.6 cm W x 8.7 cm H x 23.5 cm (8.5" x 3.44" x 9.25") for IEEE-488 interface option. |
| Weight | 2.3 kg (5 lb). |

Operating Temperature Range: 10°C to 40°C.
Storage Temperature Range: -40°C to 60°C.

ORDERING INFORMATION

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|------------------|---|
| Model VI-700-110 | Precision Voltage & Current Source; 110 Vac op. |
| Model VI-700-220 | Precision Voltage & Current Source; 220 Vac op. |
| -HP Option | High power output, up to 200 mA output |
| -HI Option | 200 mA output (in addition to 200 μ A-20 mA) |
| -HV Option | 200 V output (in addition to 100 μ V -10 mV) |
| -RS Option | Remote sensing directly to load |
| -BCD Option | Parallel BCD Remote Programming |
| -IEEE Option | IEEE-488 Remote Programming |
| IEEE-488 | Interface hardware (see p. 48) |
| IEEE-488 | Interface software (see pp. 46-47, 49) |
| BP-511 | Battery Pack, AC source, 115 V, 60 Hz, 300 W (see p. 48) |

