

SPECIFICATIONS

AC Line Voltage:

120 Vrms nominal

Switch selectable to 240 Vrms nominal

Line voltage measurement:

Range: 80 Vrms—140 Vrms (120 Vrms operation)
160 Vrms—280 Vrms (240 Vrms operation)

Accuracy: $\pm 1.5\%$

Low line voltage threshold:

Standard factory setting: 105 Vrms

Front Panel adjustable, 80 Vrms—140 Vrms (120 Vrms operation)
160 Vrms—280 Vrms (240 Vrms operation)

Response time: 100 msec

High line voltage threshold:

Standard factory setting: 126 Vrms

Front panel adjustable, 80 Vrms—140 Vrms (120 Vrms operation)
160 Vrms—280 Vrms (240 Vrms operation)

Response time: 100 msec

AC Voltage Spike:

Range: -508 Vpk to $+508$ Vpk

Accuracy: $\pm 10\%$

Response: 5 μ s to stated accuracy. Useful response down to 500ns.

Threshold: Standard factory setting: 100 Vpk

Front Panel adjustable, 32 Vpk to 286 Vpk

Line Frequency:

Nominal operating frequencies: 50Hz, 60Hz (automatic internal selection)

Thresholds: ± 2 Hz with respect to nominal operating frequency.

Switch selectable to ± 1 Hz with respect to nominal operating frequency. (See OPTIONAL SWITCH SETTINGS, page 10.)

Accuracy: ± 0.5 Hz

Response: Four consecutive samples within approximately 500 msec.

High Frequency Noise:

More than 2V pk-to-pk $\pm 10\%$ for more than 50ms $\pm 10\%$ at 100K Hz. Usable response from 25KHz to 2MHz. Switch selectable line-to-ground sensing (PHASE-mode) or neutral-to-ground sensing (NEUTRAL-mode).

Range: 1.5V to 8V pk-to-pk (See Appendix B.)

Voltage Drop:

Threshold: 70 Vrms—140 Vrms (120 Vrms operation)
140 Vrms—280 Vrms (240 Vrms operation)

(To adjust, see Appendix B.)

Accuracy: $\pm 10\%$

Response: 10ms - 25ms (adjustable - See Appendix B.)

Standard factory settings: 80 Vrms for 20ms

Power Failure:

Range: 80 Vrms - 105 Vrms (120 Vrms operation)
160 Vrms - 210 Vrms (240 Vrms operation)

(Switch selectable—See OPTIONAL SWITCH SETTINGS, page 10.)

Accuracy: $\pm 5\%$

Response: 500ms

Standard factory threshold: 90 Vrms

Power Restored:

Range: 5 Vrms above Power Failure threshold

Accuracy: $\pm 5\%$

Response: 50ms

Temperature:

Range: 32° F to 127° F (0° C to 53° C). Higher temperatures are correctly reported as "OVER 127° F." Switch selectable for Celsius or Fahrenheit temperature display.

Accuracy: $\pm 3\%$

Response: 5 minute settling to stated accuracy.

Thresholds: Adjustable, 60° F to 123° F (15° C to 50° C)

Standard factory thresholds: High Temp: 110° F
Low Temp: 60° F

DC SPECIFICATIONS

DC Voltage:

Range: - 25 Vdc to + 25 Vdc

Accuracy: $\pm 1.5\%$

Standard factory thresholds: High DC: 20.0 Vdc
Low DC: 2.5 Vdc

DC Voltage Spike:

Range: - 10 Vpk to - 25 Vpk (negative spike)
+ 10 Vpk to + 25 Vpk (positive spike)

Accuracy: $\pm 5\%$

Response: 1 μ s to stated accuracy.

Useful response down to 500ns

Standard factory threshold: 15.0 Vpk

Printing:

Black thermal printing (can be duplicated on an office copier), 14 columns, 1/2" wide. Roll is 25' long.

Clock/Calendar:

Supported by internal, rechargeable Nickel-Cadmium batteries for 2 weeks minimum without line power when batteries are fully charged.

Spare battery packs available from the factory.

Operating Conditions:

32° F to 127° F (0° C to 53° C)

10 - 90% RH non-condensing.

Physical:

Monitor: 10" x 7" x 4", 7 lbs.

Temperature probe: 2" x 1" x 1", 8 ozs., 10 ft. cable

NOTE:

1. All Vrms specifications are sine peak-sense equivalent.
2. The voltage spike and high frequency noise measurements can be made from line to ground or neutral to ground (switch selectable).
3. The line frequency measurement is made by timing successive zero crossings of the power sine waves. It is sampled approximately eight times per second.
4. Monitors are calibrated at the factory for 120 Vrms unless otherwise requested.

