

MAXIMUM READING RATES (Readings/Second)¹**DCV, DCA, ACV, ACA**

RESOLUTION	Continuous Into Memory MUX:		External Trigger Into Memory MUX:		Triggered Via IEEE-488 Bus ² MUX:	
	OFF	ON	OFF	ON	OFF	ON
4½-Digit	65	65	150	62	80	49
5½-Digit	35 (29)	9 (7.5)	40 (33)	9 (7.5)	34 (29)	9 (7.5)

OHMS

RESOLUTION	Continuous Into Memory MUX:		External Trigger Into Memory MUX:		Triggered Via IEEE-488 Bus ² MUX:	
	OFF	ON	OFF	ON	OFF	ON
4½-Digit	43	20	47	20	30	18
5½-Digit	16 (13)	9 (7.5)	16 (13)	9 (7.5)	15 (12.5)	9 (7.5)

¹Reading rates are for fixed range readings with filters off, for 3V, 3kΩ, and 30mA ranges. 5½-digit rate is for 60Hz operation. Values in parentheses are for 50Hz operation.

²One shot on TALK.

STORAGE & SCANNING CAPABILITIES

500-Reading Memory: Stores reading, range, and scanner channel.

Trigger: One shot or continuous from front panel, IEEE-488 bus, and rear panel BNC.

Programmable Reading Interval: 15ms to 999.999s.

Programmable Trigger Delay: 1ms to 999.999s.

WITH MODEL 1992 8-CHANNEL SCANNER

Programmable Configuration: 2- or 4-pole.

Programmable Channel Limit: 1 to 8.

Programmable Scanning Modes: Manual, step, and scan.

Ratio: Channels 2 through 8 referenced to Channel 1.

IEEE-488 BUS IMPLEMENTATION

MULTILINE COMMANDS: DCL, LLO, SDC, GET, GTL, UNT, UNL, SPE, SPD.

UNILINE COMMANDS: IFC, REN, EOI, SRQ, ATN.

INTERFACE FUNCTIONS: SH1, AH1, T6, TE0, L4, LE0, SR1, RL1, PP0, DC1, DT1, C0, E1.

All front panel functions and programs are available over the IEEE-488 bus, in addition to Status, Service Request, Output Format, EOI, Trigger, Terminator, Display Message, and Non-Volatile TRANSLATOR.

IEEE-488 address is programmable from the front panel.

MODEL 1992 SCANNER OPTION

CONTACT CONFIGURATION: 8-channel 2-pole, or 4-channel 4-pole.

CONTACT POTENTIAL: <1μV per contact pair.

MAXIMUM SWITCHING RATE: 40 channels/second, including Model 199 4½-digit DCV reading time.

CONNECTOR TYPE: Quick disconnect screw terminals, #14 AWG maximum wire size.

MAXIMUM SIGNAL LEVEL: 200V peak, 100mA, resistive load.

CONTACT LIFE: >10⁶ operations (at maximum signal level); >10⁸ operations (cold switching).

CONTACT RESISTANCE: <1Ω.

ISOLATION BETWEEN ANY TWO TERMINALS: >10⁹Ω, <75pF.

ISOLATION BETWEEN ANY TERMINAL AND EARTH: >10⁹Ω, <150pF.

COMMON MODE VOLTAGE: 350V peak between any terminal and earth.

MAXIMUM VOLTAGE

BETWEEN ANY TWO TERMINALS: 200V peak.

MAXIMUM VOLTAGE BETWEEN ANY TERMINAL AND MODEL 199 INPUT LO: 200V peak.

DIMENSIONS, WEIGHT: 25mm high × 130mm wide × 170mm deep (½ in. × 5 in. × 6½ in.). Adds 0.3kg (8 oz.) to Model 199.

GENERAL

MAXIMUM READING: 302,999 counts in 5½-digit mode.

CONNECTORS: **Measurement:** Switch selectable front or rear, safety jacks. **Digital:** TRIGGER input and METER COMPLETE output on rear panel, BNCs.

WARMUP: 2 hours to rated accuracy.

TEMPERATURE COEFFICIENT (0°-18°C & 28°-50°C): < ±(0.1 × applicable accuracy specification)/°C.

ISOLATION: Input LO to IEEE LO or power line ground: 500V peak. 5 × 10⁸ V•Hz maximum. >10⁹Ω paralleled by 400pF.

OPERATING ENVIRONMENT: 0°-50°C, 80% relative humidity up to 35°C; linearly derate 3% RH/°C, 35°-50°C (0%-60% RH up to 28°C on 300MΩ range).

STORAGE ENVIRONMENT: -25° to +65°C.

POWER: 105-125V or 210-250V, rear panel switch selected, 50Hz or 60Hz, 20VA maximum. 90-110V and 180-220V versions available upon request.

DIMENSIONS, WEIGHT: 90mm high × 220mm wide × 330mm deep (3½ in. × 8¾ in. × 12¾ in.). Net weight 3kg (6 lbs., 8 oz.).

ACCESSORIES SUPPLIED: Model 1751 Safety Test Leads, Instruction Manual.

ACCESSORIES AVAILABLE:

Model 1992: 8-Channel Scanner

Model 1993: Quick Disconnect Scanner Connector Kit

Model 1998-1: Single Fixed Rack Mounting Kit

Model 1998-2: Dual Fixed Rack Mounting Kit

Model 1651: 50-Ampere Shunt

Model 1681: Clip-On Test Lead Set

Model 1682A: RF Probe

Model 1685: Clamp-On Current Probe

Model 1751: General Purpose Test Leads

Model 1754: Universal Test Lead Kit

Model 5806: Kelvin Clip Leads

Model 7007-1: Shielded IEEE-488 Cable, 1m

Model 7007-2: Shielded IEEE-488 Cable, 2m

Model 7008-3: IEEE-488 Cable, 0.9m (3 ft.)

Model 7008-6: IEEE-488 Cable, 1.8m (6 ft.)