

HIOKI



3801-50/3802-50 DIGITAL HiTESTER



High Performance, Superior Functionality, and Advanced Safety

- CAT IV 600V with built-in protective circuitry for all functions
- True RMS and Super High $\pm 0.025\%$ accuracy (when measuring DC voltage)
- Large 51000 maximum count display
- Optional PC application package for transferring important measurement data and basic remote control



ISO 9001
JMI-0216



ISO 14001
JQA-E-90091



<http://www.hioki.co.jp/>

HIOKI company overview, new products, environmental considerations and other information are available on our website.



■ 3801-50/3802-50 Specifications

The safe and advanced functions of these all-in-one instruments address a wide variety of user needs, from maintenance in the field to measurement analysis in the lab.

High resolution display with a maximum 51000 count

Button-controlled display backlight

RMS : True RMS value measurement
 \sim : AC + DC measurement (3801-50 only)

Supplementary (secondary) display for checking two parameters simultaneously

Pseudo-signal source and pulse output for various types of pulse equipment (3801-50 only)

CAT IV 600V, CAT III 1000V safe design



3801-50

		3801-50	3802-50
Display	AC measurement	True RMS value measurement system	
	Data display	Primary display and secondary display: 4 1/2 characters	
	Maximum count	[51000], [15000] 1000 mV/V range, [99999] Hz function, [9999] C function	
	Bar graph	Scale display, 21 dot bar display. +/- polarity indication	
Measurement function/basic accuracy	DC voltage	51.000mV to 1000.0V	
	Basic accuracy	$\pm 0.025\% \text{rdg.} \pm 5 \text{dgt.}$	$\pm 0.03\% \text{rdg.} \pm 10 \text{dgt.}$
	AC voltage	51.000mV to 1000.0V	
	Basic accuracy	$\pm 0.4\% \text{rdg.} \pm 25 \text{dgt.}$	$\pm 0.6\% \text{rdg.} \pm 25 \text{dgt.}$
	AC+DC voltage	51.000mV to 1000.0V	---
	Basic accuracy	$\pm 0.4\% \text{rdg.} \pm 30 \text{dgt.}$	---
	DC current	510.00 μ A to 10.000A	
	Basic accuracy	$\pm 0.15\% \text{rdg.} \pm 25 \text{dgt.}$	$\pm 0.2\% \text{rdg.} \pm 25 \text{dgt.}$
	AC current	510.00 μ A to 10.000A	
	Basic accuracy	$\pm 0.7\% \text{rdg.} \pm 20 \text{dgt.}$	$\pm 1\% \text{rdg.} \pm 25 \text{dgt.}$
	AC+DC current	510.00 μ A to 10.000A	---
	Basic accuracy	$\pm 0.8\% \text{rdg.} \pm 25 \text{dgt.}$	---
	Resistance	510.00 Ω to 510.00M Ω , 510.00nS	510.00 Ω to 51.000M Ω , 510.00nS
	Basic accuracy	$\pm 0.05\% \text{rdg.} \pm 5 \text{dgt.}$	$\pm 0.08\% \text{rdg.} \pm 5 \text{dgt.}$
	Continuity	Buzzer sounds for less than 1000 count in each range	
	Diode	Measured current: 1.00mA, open terminal voltage: 4.8V	
	C (capacitance)	9.999nF to 99.99mF	
	Basic accuracy	$\pm 1.5\% \text{rdg.} \pm 5 \text{dgt.}$	
	Frequency	99.999Hz to 999.99kHz	
	Frequency counter	99.999Hz to 99.999MHz	---
Basic accuracy	$\pm 0.02\% \text{rdg.} \pm 3 \text{dgt.}$ (less than 20MHz)		
Temperature (k)	-200.0 to 1372.0 $^{\circ}$ C		
Temperature (J)	-210.0 to 1200.0 $^{\circ}$ C	---	
Duty ratio	99.99%		
Pulse width	510.00ms to 1999.9ms		
Pulse output	0.5 to 4800Hz, 2.8V	---	

		3801-50	3802-50
Additional Functions/General Specifications	Additional functions	Aurorance / Manual range / PC-compatibility (RS232C, USB) / Refresh hold / Trigger hold / Peak hold / Recording / 4 - 20mA (0 - 20mA)% conversion display / dB decibel conversion display / Relative value (REL) display / Terminal A improper connection warning / Display backlight / Auto power save / Battery life warning / Overload warning	
	Sample rate	3.75 times/s (V and, A measurement), 1.65 times/s (AC + DC measurement), 1.12 times/s (Hz and DUTY ratio measurement; [1Hz or more]), pulse width measurement [1Hz or more], 7.5 times/s (Ω measurement)	
	Max. input voltage	V terminal ... DC 1000V/AC 1000Vrms (sin) or 107V Hz	
	Max. input current	A terminal ... Continuous to DC/AC 10A; up to DC/AC 20A within 30s μ A, mA terminal ... DC/AC 510mA	
	Location / Temp. and humidity range for use	Indoors, up to an altitude of 2000m/ 0 $^{\circ}$ C to 50 $^{\circ}$ C / up to 80%rh (no condensation)	
	Power supply (operating time)	6F22(006P, 9V Manganese) battery \times 1 (20 hours) or 6LR61(9V Alkaline) battery \times 1 (50 hours)	
	Dimensions and mass	90mm(3.54")W \times 192mm(7.56")H \times 37mm(1.46")D mm (excluding protrusions) 100mm(3.94")W \times 202mm(7.95")H \times 57mm(2.24")Dmm (including holster) /450g(15.9oz)(with battery) 680g(24.0oz) (with holster and battery)	
	Applicable standards	Safety: EN61010-1:2001 EN61010-031:2002 Pollution class 2 Measurement category CAT III 1000V, CAT IV 600V Expected overvoltage 8000V EMC: EN61326:1997 + A1: 1998 + A2:2001	
	Warranty period	3 years (excludes measurement accuracy)	
	Accessories	3851-10 Test Lead, holster (for main unit), battery (6LR61) \times 1 (for monitor in main unit)	

■ Optional Accessories

3853 Carrying Case
 3856-01 Communications Package (RS-232C)
 3856-02 Communications Package (USB)
 9180 Sheath-type Temperature Probe
 9181 Surface-type Temperature Probe
 9182 Sheath-type Temperature Probe
 9183 Sheath-type Temperature Probe
 9472 Sheath-type Temperature Probe

9473 Sheath-type Temperature Probe
 9474 Sheath-type Temperature Probe
 9475 Sheath-type Temperature Probe
 9476 Surface-type Temperature Probe
 9617 Clip with Base (not CE approved)
 9618 Clip-type Lead (not CE approved)

HIOKI

HIOKI E. E. CORPORATION

HEAD OFFICE :

81 Koizumi, Ueda, Nagano, 386-1192, Japan
 TEL +81-268-28-0562 / FAX +81-268-28-0568
 E-mail: os-com@hioki.co.jp

HIOKI USA CORPORATION :

6 Corporate Drive, Cranbury, NJ 08512 USA
 TEL +1-609-409-9109 / FAX +1-609-409-9108
 E-mail: hioki@hiokiusa.com

Shanghai Representative Office :

1704 Shanghai Times Square Office
 93 Huaihai Zhong Road
 Shanghai, 200021, P.R.China
 TEL +86-21-6391-0090, 0092
 FAX +86-21-6391-0360
 E-mail: info@hioki.cn

DISTRIBUTED BY

FINAL TEST^{MR}

Venta de Instrumentos de Prueba y Medición

Calle del Ebanó #16625
 Jardines de Chapultepec
 Tijuana B. C. Mexico
 Tel. (664) 681 1130
 Fax. (664) 681 1150
 Tel. 01800 027-4848
 www.finaltest.com.mx