DIGITAL MULTIMETERS

KEW **1051/1052**
KEW **1061/1062**

photo : 1052   photo : 1062

CE

| TRUE RMS | CAT.IV 600V | DC AC V | DC AC A | DC+AC | Ω | LP-Ω | ●))) | →▶— | —⊣⊢— |
1061,1062 ... 1062 ... Except for 1051

| Hz | DUTY | °C | dB | ☼ | DATA HOLD | PEAK HOLD | MAX/MIN AVG | REL | Filter |

Except for 1051

| USB | AUTO POWER OFF |

- True-RMS or MEAN value detection mode can be selected *only for 1052, 1062
- DC+AC TRMS Measurement *only for 1061, 1062
  AC and DC values are displayed simultaneously via dual display.
- Fast Peak Hold response time of 250µs *only for 1062
- Low-pass filter *except for 1061
- Low Power-Ω measurements *only for 1062
- User calibration function

Safety design for industrial use
- Complies with IEC 61010-1 CAT. Ⅲ 1000V, CAT. Ⅳ 600V
- Terminal shutter to prevent incorrect test leads' insertion in current terminals
- Very wide operating temperature range
  From -20 to +55°C for 1061/1062
  From -10 to +55°C for 1051/1052

Reliable support for data management
*except for 1051
- Large data internal memory
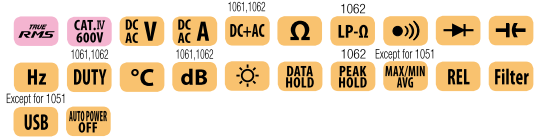- Download data and Live Monitoring on a PC via the USB interface (Option for USB Communication set)*only for 1062

High Accuracy, High Performance and Reliable Measurements
- Top accuracy
  0.02% basic DC accuracy for 1061/1062.
  0.09% basic DC accuracy for 1051/1052.
- Dual display
  1061/1062: 50,000 counts, Bar graph with 51 segments. White back light display.
  1051/1052: 6,000 counts, Bar graph with 31 segments. Orange back light display.
- True-RMS Measurements
- Wide AC Frequency bandwidth from 10Hz to 100kHz *only for 1062

	1051	1052	1061	1062
Detection mode	RMS	MEAN/RMS (switch)	RMS	MEAN/RMS (switch)
DC V	600.0mV/6.000/60.00/600.0/1000V (Input impedance: 10MΩ [600mV/60/600/1000V], 11MΩ [6V]) ±0.09%rdg±2dgt (Basic accuracy)		50.000/500.00/2400.0mV/5.0000/50.000/500.00/1000.0V (Input impedance: Approx. 100MΩ [50/500/2400mV], 10MΩ [5/50/500/1000V]) ±0.02%rdg±2dgt (Basic accuracy)	
AC V [RMS]	600.0mV/6.000/60.00/600.0/1000V (Input impedance: 10MΩ<200pF [600mV], 11MΩ<50pF [6V], 10MΩ<50pF [60/600/1000V]) ±0.5%rdg±5dgt (Basic accuracy)		50.000/500.00mV/5.0000/50.000/500.00/1000.0V (Input impedance:11MΩ<50pF [50/500mV/5V],10MΩ<50pF [50/500/1000V])	
			±0.7%rdg±30dgt (Basic accuracy)	±0.4%rdg±30dgt (Basic accuracy)
AC V [MEAN] *	–	–	–	50.000/500.00mV/5.0000/50.000/500.00/1000.0V(Input impedance: 11MΩ<50pF [50/500mV/5V], 10MΩ<50pF[50/500/1000V]) ±1%rdg±30dgt (Basic accuracy)
DCV+ACV	–	–	5.0000/50.000/500.00/1000.0V (Input impedance: 11MΩ<50pF [5V], 10MΩ<50pF [50/500/1000V])	
			±1%rdg±10dgt (Basic accuracy)	±0.5%rdg±10dgt (Basic accuracy)
DC A	600.0/6000µA/60.00/440.0mA/6.000/10.00A ±0.2%rdg±2dgt (Basic accuracy)		500.00/5000.0µA/50.000/500.00mA/5.0000/10.000A ±0.2%rdg±5dgt (Basic accuracy)	
AC A [RMS]	600.0/6000µA/60.00/440.0mA/6.000/10.00A ±0.75%rdg±5dgt (Basic accuracy)		500.00/5000.0µA/50.000/500.00mA/5.0000/10.000A	
			±1%rdg±20dgt (Basic accuracy)	±0.75%rdg±20dgt (Basic accuracy)
AC A [MEAN] *	–	–	–	500.00/5000.0µA/50.000/500.00mA/5.0000/10.000A ±1.5%rdg±20dgt (Basic accuracy)
DCA+ACA	–	–	500.00/5000.0µA/50.000/500.00mA/5.0000/10.000A	
			±1.5%rdg±10dgt (Basic accuracy)	±1%rdg±10dgt (Basic accuracy)
Ω	600.0Ω/6.000/60.00/600.0kΩ/6.000/60.00MΩ ±0.4%rdg±1dgt (Basic accuracy)		500.00Ω/5.0000/50.000/500.00kΩ/5.0000/50.000MΩ	
			±0.1%rdg±2dgt (Basic accuracy)	±0.05%rdg±2dgt (Basic accuracy)
LowPower-Ω *	–	–	–	5.000/50.00/500.0kΩ/5.000MΩ ±0.2%rdg±3dgt (Basic accuracy)
Continuity buzzer	600.0Ω (The buzzer turns on for resistances lower than 50±30Ω)		500.0Ω (The buzzer turns on for resistances lower than 100±50Ω)	
Diode test	2.000V ±1%rdg±2dgt Open circuit voltage: <3.5V (Approx. 0.5mA Measuring Current)		2.4000V ±1%rdg±2dgt Open circuit voltage: <5V (Approx. 0.5mA Measuring Current)	
Capacitance	10.00/100.0nF/1.000/10.00/100.0/1000µF ±2%rdg±5dgt (Basic accuracy)		5.000/50.00/500.0nF/5.000/50.00/500.0µF/5.000/50.00mF ±1%rdg±5dgt (Basic accuracy)	
Frequency	10.00~99.99/90.0~999.9Hz/0.900~9.999/9.00~99.99kHz ±0.02%rdg±1dgt (Basic accuracy)		2.000~9.999/9.00~99.99/90.0~999.9Hz/0.900~9.999/9.00~99.99kHz ±0.02% rdg±1dgt (Basic accuracy)	
DUTY	–	–	10~90% ±1%rdg	
Temperature	-50~600°C ±2%rdg±2°C (with the use of K-type Temperature probe)		-200~1372°C ±1%rdg±1.5°C (with the use of K-type Temperature probe)	
Application standards	IEC 61010-1 CAT.Ⅳ 600V, CAT.Ⅲ 1000V Pollution degree 2, IEC 61010-031, IEC 61326-1 (EMC)			
Power source	R6 (1.5V)×4 (Auto power off: approx. 20 minutes)			
Dimensions	192(L)×90(W)×49(D) mm			
Weight	Approx. 560g (including batteries)			
Accessories	7220A (Test Leads), R6×4, 8926 (Fuse [440mA/1000V])×1 (included), 8927 (Fuse [10A/1000V])×1 (included) Instruction manual			

DIGITAL MULTIMETERS

Reliable support for data management

※ except for 1051

Large internal memory to store test data

- KEW1062: 10,000 data in Logging mode, 100 data manually saved.
- KEW1061: 1,000 data in Logging mode, 100 data manually saved.
- KEW1052: 1,600 data in Logging mode, 100 data manually saved.
- Logging interval can set from 1 sec. to 30 min.

Test data can be transferred to a PC or directly to a Printer*

- Real-time data can be transferred and shown on a PC.
- Real-time transferring permits the saving of a considerable amount of data on a PC.
- Stored data of internal memory can be monitored by PC.

Data management with the software DMM Application*

- Stored data of internal memory can be monitored by PC.
- List of measured data can be converted into Graph.
- Data can be transferred to Excel** and saved as CSV file.

  *Optional accessories are required, refer to last page.
  **Excel is a registered trademark of Microsoft in the USA.

Data analysis with Excel	Printer output
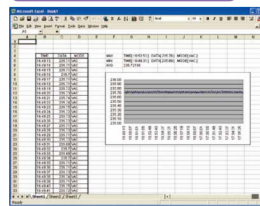
Printer output	
L0000	N.+12.539 VDC
L0001	N.+12.532 VDC
L0002	N.+12.532 VDC
L0003	N.+12.529 VDC
L0004	N.+12.532 VDC
L0005	N.+12.538 VDC
L0006	N.+12.541 VDC
L0007	N.+12.546 VDC
L0008	N.+12.552 VDC
L0009	N.+12.557 VDC
L0010	N.+12.555 VDC
L0011	N.+12.554 VDC
L0012	N.+12.553 VDC
	+12.553 VDC

Printed items (from the left)
- L: Logging memory
- 4 digit numbers: Data number
- N: Normal measurement
  (O: at "OL" display)
  (B: at "Battery warning" display)
- 5 digit numbers: Measurement
- VDC: Unit (VDC is DC Voltage)

DMM Application software

235.73VAC
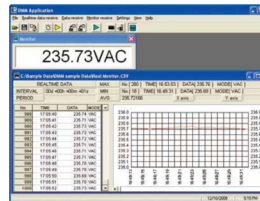
System requirements
OS: Windows®7(32/64bit)/Vista/XP
Display: XGA (Resolution 1024 x 768 dots) or more
Hard-disk: Space required 10Mbyte or more
Others: With CD-ROM drive and USB port

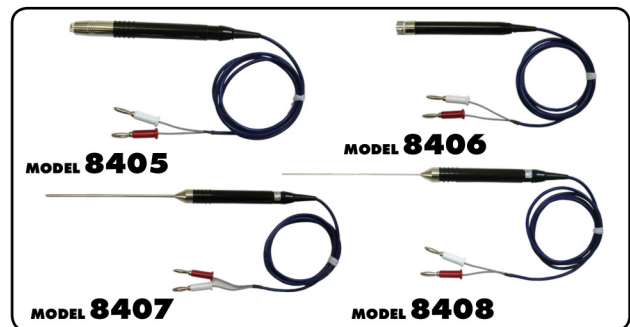* Windows® is a registered trademark of Microsoft
  in the United States.

Optional Accessories

Description	MODEL	Contents
Alligator Clip	7234	CAT.Ⅳ 600V、CAT.Ⅲ 1000V 1set
USB Communication set	8241	USB adaptor+USB cable+DMM Software
DMM Printer full set	8249	8243+8246+8248
Printer Communication set	8243	Printer Adapter+RS232 cable
Printer	8246	Printer (paper width 112mm)+paper×1 roll
AC adapter for printer [EU]	8248	AC230V±10%
Thermal paper for printer	8247	10 rolls
Thermocouple Type K	8405	Max. 500℃ (Surface type, Point material: Ceramic)
	8406	Max. 500℃ (Surface type)
	8407	Max. 700℃ (Liquid, Semi-solid)
	8408	Max. 600℃ (Air, Gas)
Clamp sensor	8121	AC 100A
	8122	AC 500A
	8123	AC 1000A
	8146	AC 30A
	8147	AC 70A
	8148	AC 100A
Banana φ4mm Adjuster Plug	7146	length :190mm
Carrying case	9154	Soft case（for the main unit with test leads and communication cable)

Alligator clip (7234) USB Communication set (8241)

8243

8248 8246

<DMM Printer full set（8249）>

Carrying case (9154) Banana φ4mm adjuster plug (7146)
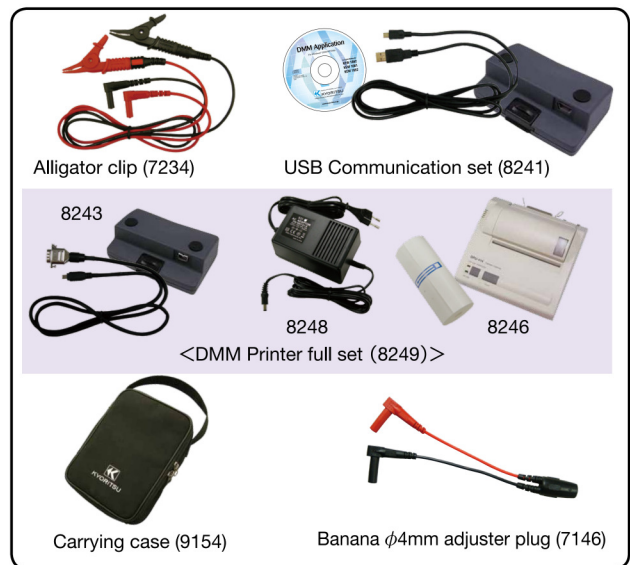
Thermocouple Type K Specification

MODEL	Usage	Measurement temperature	Tolerance (t: measurement temperature)	Response speed
8405	(Surface type, Point material: Ceramic)	Max. 500℃	±2.5℃/t=-40℃～333℃, ±0.0075×｜t｜℃/t =333℃～500℃	approx. 1.8 Sec.
8406	Surface type			approx. 1.0 Sec.
8407	(Liquid, Semi-solid)	Max. 700℃	±2.5℃/t=-40℃～333℃, ±0.0075×｜t｜℃/t =333℃～700℃	1 Sec. or less
8408	(Air, Gas)	Max. 600℃	±2.5℃/t=-40℃～333℃, ±0.0075×｜t｜℃/t =333℃～600℃	0.4 Sec.

MODEL **8405** MODEL **8406**

MODEL **8407** MODEL **8408**

Clamp sensor Specification

	AC/DC current sensor	AC current sensor			Leakage & AC current sensor		
	8115	**8121**	**8122**	**8123**	**8146**	**8147**	**8148**
	CE	CE	CE	CE	CE	CE	CE
Conductor size	φ12	φ24	φ40	φ55	φ24	φ40	φ68
Rated current	Surface type	AC 100A	AC 500A	AC 1000A	AC 30A	AC 70A	AC 100A
Output voltage	(Liquid, Semi-solid)	AC 500mV/100A	AC 500mV/500A	AC 500mV/1000A	AC 1500mV/30A	AC 3500mV/70A	AC 5000mV/100A
Accuracy (50/60Hz)	AC ±1.0%rdg±0.4mV DC ±1.0%rdg±0.4mV (This accuracy is defined after a zero-adjustment)	±2.0%rdg±0.3mV			0~15A ±1.0%rdg±0.1mV 15~30A ±5.0%rdg	0~40A ±1.0%rdg±0.1mV 40~70A ±5.0%rdg	0~80A ±1.0%rdg±0.1mV 80~100A ±5.0%rdg
Frequency range	40Hz～1kHz						
Dimensions	127(L)×42(W)×22(D)mm	97(L)×59(W)×26(D)mm	128(L)×81(W)×36(D)mm	170(L)×105(W)×48(D)mm	100(L)×60(W)×26(D)mm	128(L)×81(W)×36(D)mm	186(L)×129(W)×53(D)mm
Weight	approx. 160g	approx. 150g	approx. 260g	approx. 360g	approx. 150g	approx. 240g	approx. 510g