



DT 4200 SERIES MADE IN JAPAN



Newly released "DT4261" for wireless communication and DC high voltage measurement!



Bluetooth® wireless technology support for recording and managing measurement data



Bluetooth® communication with Z3210 attached to DT4261

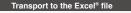


Install the Wireless Adapter Z3210 to the DT4261 to enable Bluetooth® communications. With the Z3210, you can transfer data directly to an Excel® file or pair the instrument with GENNECT Cross.













Manage measurement data using GENNECT Cross

Pair the DT4261 built in with Bluetooth® wireless technology with the free GENNECT Cross mobile app to further data management, processing and report exporting on your mobile device.



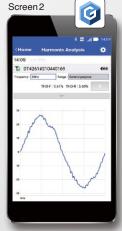
GENNECT



Transfer data to a tablet wirelessly



Take a picture of the test location and map measured values on it



View and verify waveforms on your mobile device like on an oscilloscope

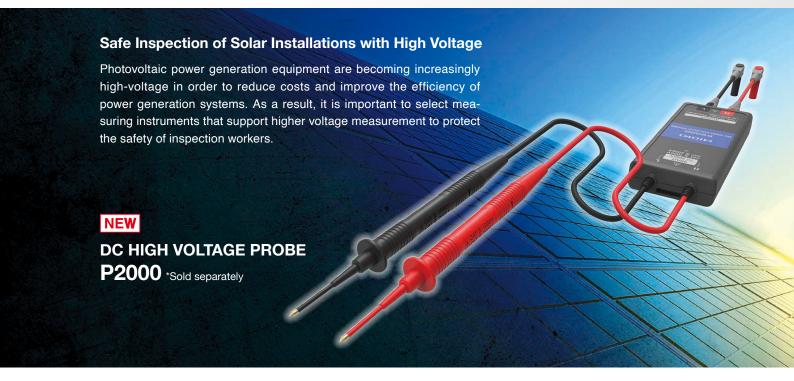


Troubleshoot with simple harmonic analysis in the field



- Save data and create reports right on the App
- Share data via cloud services or E-mail

Measurement up to CAT III 2000 V with the DC High Voltage Probe P2000 in Combination with DT4261



Safe testers that protect workers from dangerous accidents

Built-in voltage input terminal protection fuse to prevent internal short circuits



The DT4255's voltage input terminals incorporate a protective fuse so that contamination of the instrument's internal components with iron powder or other particulate matter will not result in an internal short-circuit. The fuse can be replaced easily on site.

Terminal shutter to prevent accidental insertion



The DT4281, DT4282 and DT4261 use terminal shutters to keep probes from being inserted into the wrong inlets. The shutters block whichever terminal is not being used based on the selected measurement function.

Over-input warning function

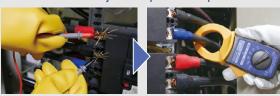




To prevent an accident, a warning function immediately notifies the operator if the DMM receives excessively high input.

*Red screen available on high-end models and DT4261, DT4223, DT4224 only.

Current measurement by AC clamp sensors to prevent accidents



The DT4281, DT4261, DT4253, DT4255 and DT4256 eliminate the root cause of such accidents by providing clamp-on sensor-based current measurement functionality instead of using conventional probes.

Equipped with a protection circuit to prevent accidents from incorrect voltage input

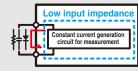


Resistance range measurement circuit



Input-based switching of the measurement circuit

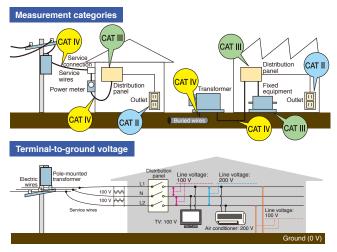




Switch to resistance range Detect input Switch measurement circuit

The DT4223 and DT4224 are equipped with a protection circuit that prevents electrical accidents that occure when voltage is input in the resistance range. The measurement circuit is switched after the instrument detects resistance, continuity, capacitance, or diode input. Even if you mistakenly input voltage with the instrument set to the resistance range, the high input impedance will limit the current flowing to the instrument to 1.5 mA or less to prevent potential hazards.









Safe measurement requires use of an instrument that suits the measurement location.

To ensure operators' ability to use measuring instruments safely, IEC 61010 classifies the locations in which instruments are used into a series of safety-based measurement categories (ranging from CAT II to CAT IV). Using an instrument that does not satisfy the required safety level can lead to an electrical accident.

CAT IV	600	Measurement category
\		suited to the location of use
High-end mod	dels	CAT III 1000 V / CAT IV 600 V
New Standard I	Model	CAT III 1000 V / CAT IV 600 V
Standard mod	dale	CAT III 1000 V / CAT IV 600 V

CAT III 600 V

Designed and manufactured in Japan to ensure high quality and guaranteed with a 3-year warranty for peace of mind

Pocket models

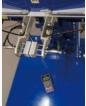


/ CAT IV 300 V

All development, design, and manufacturing processes for almost all Hioki digital multimeters are carried out at our Head Office in Nagano Prefecture. Some of the industry's most advanced technological capabilities enable us to deliver products of the highest possible quality.

Field-Proven Strength and Usability DT4200 series

Robust design capable of withstanding a drop from a height of 1 m onto concrete





To test our products' ability to withstand mechanical shock, we repeatedly drop them from a height of at least 1 m until they break. This drop-testing regime leads to more robust products by fostering a series of design improvements.

Drop tester

Preventing instrument failure by keeping out dust



If dust gets into the instrument's enclosure, it can cause the device to fail. Since dust can get into the instrument especially easily through the gap around the rotary switch, the DT4200 series incorporates a dust-proof part known as an O-ring where the rotary switch is mounted to improve the device's dust resistance.

Fast, accurate measurement of the output voltage on the secondary side of an inverter



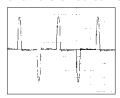




With low-pass filter off With low-pass filter on

The DT series can accurately measure the voltage on the secondary side of an inverter, just like a power meter. Its low-pass filter rejects harmonic components so that the fundamental wave can be isolated and accurately measured.

True RMS measurement for accurate measurement of even distorted current waveforms







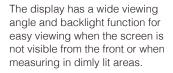
Average-value method measured value

True RMS method measured value

Current waveforms are often distorted, causing the average-value and true RMS measurement methods to yield different results. To obtain accurate readings, RMS measurement is indispensable.

Outstanding viewing angle so display is easy to read at an angle or even in a dim location and rotary switch that's easy to operate even when wearing gloves







Rotary switch is designed to be easy to turn even when wearing thick work gloves, for example while working in hazardous measurement locations or harsh

Hand-free and easy to use



It's hard to carry out work tasks smoothly when you're juggling a measuring instrument, probes, recording paper, and other supplies. Field concerns like these are resolved by the DT4200's magnetic strap, auto-hold function*, and ability to save results in its internal memory. These capabilities boost work efficiency and help reduce work times.

*The auto-hold function is available exclusively in high-end, standard models and DT4261,DT4223,DT4224. The ability to save results in internal memory is available exclusively in high-end models.

New L9300 test leads with integrated cap*







Learn more about the L9300







Test leads L9300 now incorporate integrated caps. The design lets you change the measurement category simply by sliding the test lead's protective finger guard. As an added bonus, you no longer have to worry about losing caps!

Extensive selection of probe tips that you can choose based on the measurement location, improving ease of measurement





With screw terminals

In deep-set locations that can't be reached with other probes



For clamping around the target busbar

With the DT4200, you can choose the probe type that best suits your measurement location, making it possible to measure in areas that can't be reached with conventional probes and busbars that you wish to clamp between probes.

*Compatible probe tips vary with the DMM model. Please see page 16. The optional Connection Cable L4930 is required in order to use the probes shown at the left.



High-end models

Featuring high accuracy, extensive additional functionality, and a broad range of measurement parameters

DC V typical accuracy: ±0.025% rdg. ±2 dgt.
Measurement categories: CAT III (1000 V), CAT IV (600 V)



For electrical work in the field DT4281

Designed for maximum safety in the field when measuring current with clamp-on sensors.

DC voltage	60.000 mV to 1000.0 V
AC voltage	60.000 mV to 1000.0 V
DC + AC voltage	6.000 V to 1000.0 V
DC current	600.00 μA to 600.00 mA
AC current	600.00 μA to 600.00 mA
AC clamp-on measurement	Frequency
AC clamp-on measurement Resistance	Frequency Continuity check
Resistance	Continuity check



For laboratory and research use DT4282

Designed for use in laboratories and R&D applications where you wish to measure a wide variety of parameters.

DC voltage	60.000 mV to 1000.0 V
AC voltage	60.000 mV to 1000.0 V
DC + AC voltage	6.000 V to 1000.0 V
DC current	600.00 μA to 10.000 A
AC current	600.00 μA to 10.000 A
AC clamp-on measurement	Frequency
AC clamp-on measurement Resistance	Frequency Continuity check
	. ,
Resistance	Continuity check

Functions and Features



Magnetic strap frees both hands for work

Using the magnetic strap (option)

By using the magnetic strap to secure the instrument to the wall, you can free both hands so that you can more easily record measured values, significantly boosting work efficiency.



Automatically hold display values and save results with one touch to the DMM's internal memory

The display is automatically held once the measured value stabilizes. You can save measurement results to the instrument's internal memory simply by pressing the MEM key, making it easy to read and record values during inspection work.



Manage measurement data on a computer

Using the Communication Package DT4900-01 (option)

Measurement results can be downloaded to a computer via a USB connection. Once downloaded, you can save them as a file (text format) or display them as a graph using the desired interval. Results can also be sent in real time while measurement is ongoing.

*The computer and multimeter are electrically isolated by means of optical communications so that data can be sent with peace of mind.



Measure output voltage on the secondary sides of inverters

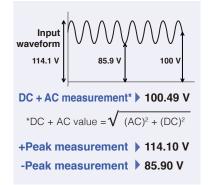
Accurately measure the fundamental wave alone by eliminating harmonic components with the DMM's low-pass filter function.





Ripple voltage confirmation of DC charging systems Peak value measurement / DC + AC voltage measurement

High-end models can detect ripple voltage with a superposed DC signal.



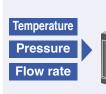


Percentage display for instrumentation signal measurement 4 to 20 mA / 0 to 20 mA percentage-equivalent display

You can check percentage-equivalent values.

=	04-20mA	APS ((r+1))

Output 1	Display
4 mA	0%
20 mA	100%
Output 2	Display
Output 2 4 mA	Display 0%

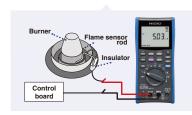






Measure very low currents used by gas-burning devices DC μA range

High-end models provide a DC 600.00 μA range for measuring burner flame currents.





Intuitive notification of continuity check results and excessively high input with a red screen backlight and beep

High-end models notify the operator of continuity check results and excessively high input with a red screen backlight and beep, making it possible to check measurement results intuitively





Display refresh rate

Change the display refresh speed to stabilize the display when performing measurement characterized by a high level of variability.



Maximum/minimum value display

Check the maximum and minimum measured values shown on the display after pressing the MAX/MIN button.



Relative display

View relative values using the display value before the relative function was enabled as the reference.



Decibel conversion

Convert the results of AC voltage measurement to a decibel value relative to a reference value and display the results (dbm/dbv).



New standard model

Supports wireless communication to increase work efficiency.

High voltage measurement up to CAT III 2000 V by connecting a dedicated probe.

DC V typical accuracy: ±0.15% rdg. ±2 dgt.
Measurement categories: CAT III (1000 V), CAT IV (600 V)

Safe Inspection of Solar Installations with High Voltage



By connecting the optional DC High Voltage Probe P2000, high voltage measurement up to CAT III 2000 V is now possible.

Why is CAT III 2000 V capability necessary?

According to the standards for Photovoltaic (PV) module safety qualification (IEC 61730-1), PV modules are treated as the overvoltage category III, and a measuring instrument in the measurement category III is required. Using instruments that can accommodate the appropriate measurement category serves to protect workers and equipment from serious accidents such as electric shock and burnout. Currently, adoption of 1500 V solar installation is growing, but instruments that can accommodate even higher voltages will be necessary in the future as larger and even more efficient systems enter into use.





Multi-functional, on-site maintenance, mega solar DT4261

Go wireless with the Z3210! For trouble analysis in the field.

DC voltage	600.0 mV to 1000 V
AC voltage	6.000 V to 1000 V
DC + AC voltage	6.000 V to 1000 V
DC current	600.0 mA to 10.00 A
AC current	600.0 mA to 10.00 A
AC clamp-on measurement	Frequency
AC clamp-on measurement Resistance	Frequency Continuity check
Resistance	Continuity check

Easily go wireless and manage your data digitally

WIRELESS ADAPTER Z3210



Wireless communication is supported in combination with the wireless adapter Z3210 (sold separately). In addition to working with the free "GENNECT Cross" application, the Excel® direct input function can also be used.

NEW DT4261-90 (Z3210 set product)

The DT4261-90, a set of DT4261 and Z3210, is also available. It is more economical than purchasing the DT4261 and Z3210 separately, and allows you to build a wireless communication environment with one purchase.







Supported measurement parameter
 Unsupported measurement parameter

Link with GENNECT Cross



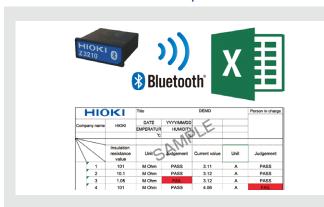
Troubleshoot in the field

When combined with GENNECT Cross, the DT4261 you can perform simple harmonic analysis. Applications include harmonic measurement of power conditioners for solar systems and problem analysis of power supply systems.

Problems that can be caused by harmonics

- · Equipment burn-out and destruction due to overheating
- Malfunctions of power control devices
- Reduced service life and efficiency for power devices

Excel® Direct Input Function



Improve work efficiency! Labor-saving measurement with digitalization

The wireless adapter Z3210 (sold separately) comes standard with an Excel® direct input function. It enables direct transfer and input of measurement data to templates created in Excel® leading to increased work efficiency in the field.

Functions and Features



surement function





Prevents incorrect current measurement with the Fuse Check function

When switching from the clamp function to the current function, a fuse disconnection check is automatically performed. This allows the user to know if the fuse is broken before current measurement, which prevents erroneous measurement.



Automatic switching of measurement in locations where AC and DC voltages are mixed

When making measurements in locations with both AC and DC voltages, automatic switching eliminates the need to operate the rotary switch and helps prevent measurement mistakes.



Terminal shutter closes on unused

terminals depending on the mea-

The DT4261's terminal shutters are linked to

access to test lead terminals that aren't being

the instrument's rotary switch. They block

used, making it physically impossible to

insert a lead into the wrong terminal.

Test leads with an integrated cap for greater convenience and safety

The L9300 test lead with an integrated cap is included as a standard. The finger guard can be easily slid to switch between measurement categories without worrying about losing the cap.



Free up hands for work with the magnetic strap* and auto-hold function

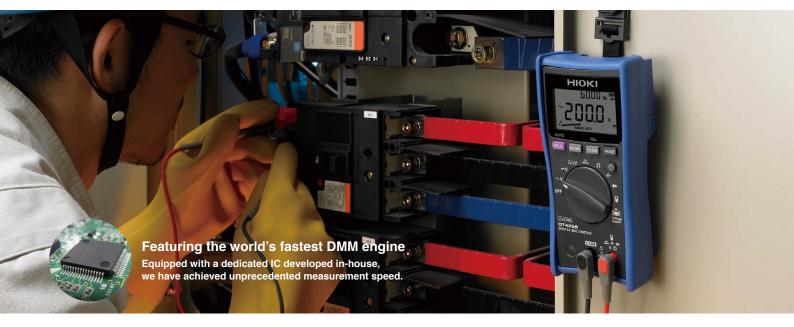
*The Magnetic Strap is sold separately

By using the magnetic strap to secure the instrument to the wall and the auto-hold function to automatically stop display values, you can free your hands, making it easier to record measured values and significantly boosting work efficiency.



Manage measurement data on a computer Using the Communication Package DT4900-01 (sold separately)

Measurement results can be downloaded to a computer via a USB connection. Once downloaded, you can save them as a file (text format) or display them as a graph using the desired interval. Results can also be sent in real time while measurement is ongoing.



Standard models

Introducing a line of field-optimized instruments that can be chosen based on the application at hand

DC V typical accuracy: ±0.3% rdg. ±3 dgt. Measurement categories: CAT III (1000 V), CAT IV (600 V)



For laboratory and research use **DT4252**

For laboratories and R&D applications where you wish to measure a wide variety of parameters.

DC voltage	600.0 mV to 1000 V
AC voltage	6.000 V to 1000 V
DC + AC voltage	DT4281/4282 only
DC current	6.000 A to 10.00 A
AC current	6.000 A to 10.00 A
AC clamp-on measurement	Frequency
Resistance	Continuity check
Resistance Temperature	Continuity check Diode test



For instrumentation 4-20 mA **DT4253**

Measure instrumentation, airconditioning equipment, and gas-burning devices.

DC voltage	600.0 mV to 1000 V
AC voltage	6.000 V to 1000 V
DC + AC voltage	DT4281/4282 only
DC current	60.00 μA to 60.00 mA
AC current	
AC clamp-on measurement	Frequency
Resistance	Continuity check
Temperature	Diode test
Capacitance	Conductance
AC/DC automatic detection	Voltage detection function



For electrical work in the field **DT4255**

Designed for maximum safety with voltage measurement terminals that are protected by a fuse.

•	
DC voltage	600.0 mV to 1000 V
AC voltage	6.000 V to 1000 V
DC + AC voltage	DT4281/4282 only
DC current	n/a
	n/a
AC clamp-on measurement	Frequency
Resistance	Continuity check
Temperature	Diode test
Capacitance	Conductance



Multifunction model **DT4256**

Delivers maximum functionality for use in a wide range of settings.

DC voltage	600.0 mV to 1000 V
AC voltage	6.000 V to 1000 V
DC + AC voltage	DT4281/4282 only
DC current	60.00 mA to 10.00 A
AC current	600.0 mA to 10.00 A
AC clamp-on measurement	Frequency
Resistance	Continuity check
Temperature	Diode test
Capacitance	Conductance
AC/DC automatic detection	Voltage detection function

Supported measurement parameter Supported measurement parameter (with model-specific variations) Unsupported measurement parameter The range figures given indicate the instrument's measurement ranges (not the range of measurable values).

Functions and Features



Magnetic strap and auto-hold function free up hands for easier work

Using the magnetic strap (option)

By using the magnetic strap to secure the instrument to the wall and the auto-hold function to automatically stop display values, you can free your hands, making it easier to record measured values and significantly boosting work efficiency.



Automatic switching of measurement in locations where AC and DC voltages are mixed

AC/DC voltage automatic detection (DT4253, DT4255, DT4256 only)

When making measurements in locations with both AC and DC voltages, automatic switching eliminates the need to operate the rotary switch and helps prevent measurement mistakes



Use a computer in the field to save and check measured values With the Communication Package DT4900-01

Measured values can be displayed in real time on a computer, and displayed values can be saved to a file (text format) or graphed at a user-specified interval.

*The computer and multimeter are electrically isolated by means of optical communications so that data can be sent with peace of mind.



Measure output voltage on the secondary sides of inverters

Accurately measure the fundamental wave by eliminating harmonic components with the DMM's low-pass filter function.



Over-input warning function

To prevent an accident, a warning function immediately notifies the operator if the DMM receives excessively high input.



Certain standard models can detect a load voltage in excess of -10 V and notify the operator with a red LED and beep. (DT4255, DT4256 only)





Percentage display for instrumentation signal measurement

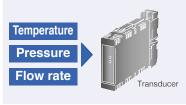
4 to 20 mA percentage-equivalent display (DT4253,DT4256 only)

The standard models' dual display function lets you to simultaneously check measured values and percentage-equivalent values at a glance.



Output	Display
4 mA	0%
20 mA	100%

Values are converted to percentages and displayed.





With low-pass filter off



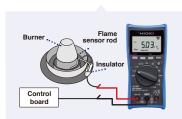


Harmonie component



Measure very low currents used by gas-burning devices DC µA range (DT4253 only)

Model DT4253 provides a DC 60.00 μA range for measuring burner flame currents.





Intuitive notification of continuity check results and excessively high input with a red LED and beep

Standard models notify the operator of continuity check results and excessively high input with a red LED and beep, making it possible to check measurement results intuitively

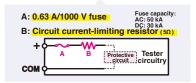


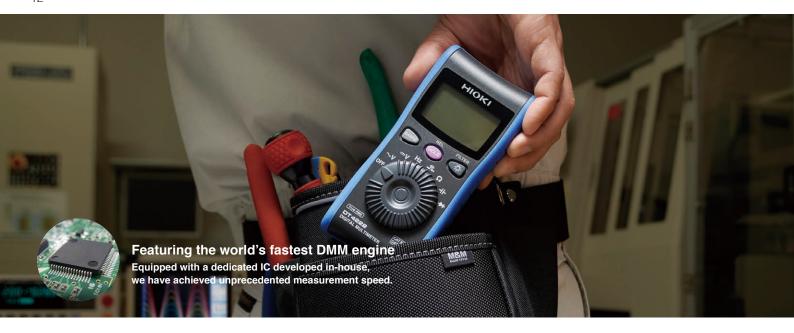


Thorough prevention of shortcircuit accidents

Voltage measurement terminal fuse (DT4255 only)

When using the resistance measurement function, a protective circuit functions to prevent a short-circuit accident in the event of erroneous operation such improperly supplying voltage input. Even if a short-circuit occurs inside the tester, a current-limiting resistor will limit any short-circuit current while a fast-blow fuse quickly and reliably disconnects the tester circuitry, preventing a short-circuit accident.





Pocket models

Featuring a compact body for ergonomic hold and a reliable, safe design

DC V typical accuracy: $\pm 0.5\%$ rdg. ± 5 dgt. Measurement categories: CAT III (600 V), CAT IV (300 V)



For electrical work in the field DT4221

Delivering maximum field safety for workers whose principal use is voltage measurement.

DC voltage	600.0 mV to 600.0 V
AC voltage	6.000 V to 600.0 V
DC + AC voltage	DT4281/4282 only
DC current	n/a
AC current	n/a
AC clamp-on measurement	Frequency
	Continuity check
Temperature	Diode test
	Conductance
AC/DC automatic detection	Voltage detection function



For multiple applications DT4222

For laboratories and R&D applications to measure a wide variety of parameters.

DC voltage	600.0 mV to 600.0 V
AC voltage	6.000 V to 600.0 V
DC + AC voltage	DT4281/4282 only
DC current	n/a
AC current	n/a
AC clamp-on measurement	Frequency
Resistance	Continuity check
Temperature	Diode test
Capacitance	Conductance
AC/DC automatic	Voltage detection



For electrical work in the field DT4223

Delivering maximum field safety for workers whose principal use is voltage measurement.

DC voltage	600.0 mV to 600.0 V
AC voltage	6.000 V to 600.0 V
DC + AC voltage	DT4281/4282 only
DC current	n/a
AC current	n/a
AC clamp-on measurement	Frequency
Resistance	Continuity check
Temperature	Diode test
Capacitance	Conductance
AC/DC automatic	Voltage detection



For multiple applications DT4224

For laboratories and R&D applications to measure a wide variety of parameters.

DC voltage	600.0 mV to 600.0 V
AC voltage	6.000 V to 600.0 V
DC + AC voltage	DT4281/4282 only
DC current	n/a
AC current	n/a
AC clamp-on measurement	Frequency
Resistance	Continuity check
Temperature	Diode test
Capacitance	Conductance
AC/DC automatic	Voltage detection

Functions and Features

New DT4223 and DT4224 feature circuit breaker false trip prevention



Prevent potential accidents during incorrect input

The measurement circuit switches only after detecting the appropriate signal. This way, even if you mistakenly input voltage, accidents due to tripped breakers or arcs will not happen. (see page 2)



LoZ icon identifies switched measurement circuit

When the instrument detects resistance, continuity, capacitance, or diode input, the LoZ icon is shown on the display, allowing you to identify at a glance which measurement circuit has been selected.



Warning function notifies you of incorrect input.

The instrument's display flashes red to warn you when voltage has been mistakenly input while the instrument is set to the resistance range.



Compact and lightweight design for outstanding ease of use

The small form factor fits in your hand perfectly and is easily stowable, making it convenient to transport to and from the field and boosting work efficiency. The lightweight design also ensures that pocket models are easy to work with.



Safe enough for measuring voltage at distribution panels and service wires

Despite a compact body, the pocket models can be used to measure voltage at distribution panels and service wires in CAT III (600 V), CAT IV (300 V) situations.



Intuitive notification of excessively high input with flashing screen

The pocket digital multimeters notify the operator of excessively high input by flashing the screen, making it possible to check measurement results intuitively.



Automatic switching of measurement in locations where AC and DC voltages are mixed

AC/DC voltage automatic detection (DT4221, DT4223 only)

When making measurements in locations with both AC and DC voltages, automatic switching eliminates the need to operate the rotary switch and helps prevent measurement mistakes.



Detect voltage simply by holding the instrument against a wire

Voltage detection function (DT4221, DT4223 only)

Easily detect voltage with the built-in sensor. Results are communicated with a beep.



Card HiTester 3244



During measurement





T4221

Immediate display of measurement results

Fast measurement for outstanding ease of use

Measured values are displayed quickly to facilitate quick testing. The difference is clear when you compare the measurement speed with that of the Hioki Card HiTESTER 3244-60.

DT4200 Series Basic Comparison

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Model category	High-end models			Standard		Consul	Electrical		t models	Consus
Measurement type	Electrical Gene work use		General use	Air conditioning/ instrumentation	Electrical work	General use	Electrical work	General use	Electrical work	General use
Model	DT4281 DT42	B2 DT4261/DT4261-90*1	DT4252	DT4253	DT4255	DT4256	DT4221	DT4222	DT4223	DT4224
Appearance	69995. 69995.	NEW 5000.	5000 5000	6000-	6000 -	5000 5000	\$500 \$100 \$100 \$100 \$100 \$100 \$100 \$100	5000	5000	6000
Basic Characteristic	es									
True RMS	~	V		•	,				V	
DC V basic accuracy	±0.025% rdg. ±2 dç	t. ±0.15% rdg. ±2 dgt.	±0.3% rc	lg. ±5 dgt.	±0.3% r	dg. ±3 dgt.		±0.5% r	dg. ±5 dgt.	
Measurement items	(Typical ranges are in	dicated; may not reflect max	imum or minir	num measurab	le signal)					
DC voltage	60 mV to 1000 V	600 mV to 1000 V, 2000V*2		600 mV to	1000 V			600 mV	/ to 600 V	
AC voltage	60 mV to 1000 V	6 V to 1000 V		6 V to	600 V			6 V to	o 600 V	
DC V + AC V	6 V to 1000 V	6 V to 1000 V		n/	a	_		ı	n/a	
DC A current	600 μA to 600 mA 600 μA to	10 A 600 mA to 10 A	6 A to 10 A	60 μA to 60 mA	n/a	60 mA to 10 A		ı	n/a	
AC A current	600 μA to 600 mA 600 μA to	10 A 600 mA to 10 A	6 A to 10 A	n/	a	600 mA to 10 A		1	n/a	
AC clamp	10 A to 1000 A n/a	10 A to 1000 A	n/a		10 A to 1000	A			n/a	
Resistance	60 Ω to 600 MΩ	600 Ω to 60 MΩ		600 Ω to	60 MΩ		n/a		600 Ω to 60 N	1Ω
Temperature	-40°C to 800°C	n/a	n/a	-40°C to 400°C		n/a			n/a	_
Capacitance	1 nF to 100 mF	1 μF to 10 mF		1 μF to	10 mF		n/a	1 μF to 10 mF	n/a	1 μF to 10 mF
Frequency	99 Hz to 500 kHz	99 Hz to 99 kHz		99 Hz to	99 kHz			99 Hz t	o 9.9 kHz	
Continuity check	✓	✓		•	•				V	
Diode check	'	~		•	•		n/a	V	n/a	~
Conductance	n/a ✔	n/a		n/	a			ı	n/a	
Voltage detection	n/a	n/a	n	/a		✓	~	n/a	~	n/a
Additional Functions	S									
AUTO AC/DC V	n/a	V	n/a		~		V	n/a	~	n/a
Peak measurement	DC/AC	DC/AC		n/					n/a	
Low-pass filter	Analog filter Cut-off: 630 Hz	Digital filter Pass-band: 100/500 Hz		Digita Pass-band:					al filter 1: 100/500 Hz	
Display update setting	~	n/a		n/	a			1	n/a	
Hold display value	AUTO/MANUAL	AUTO/MANUAL		AUTO/M	ANUAL		MAM	NUAL	AUTO/	MANUAL
Max/Min value display	 (Excluding average value di 	splay)		v	•			1	n/a	
Relative display	~	n/a		V	•				V	
Decibel conversion	✓	n/a		. n/	a			1	n/a	
Percentage conversion display	~	n/a	n/a	V	n/a	V		1	n/a	
DC voltage polarity check	·	n/a	n	/a		/		ı	n/a	
Data storage										
Capacity	Max 400 data	n/a		n/				1	n/a	
USB communication*3		~		•					n/a	
Bluetooth® communication*4	n/a	· ·		n/	a			1	n/a	
Operating time										
Continuous operating time	Approx. 100 hours	Approx. 130 hours*6		Approx. 1	30 hours		Approx.	40 hours	Approx	. 35 hours
Power supply	Alkaline (LR6) battery Manganese(R6P) batter			Alkaline (LR0	3) battery ×	4		Alkaline (LR	03) battery ×	1
Display										
Back light	· ·	V		v					V	
Dual display									n/a	
Bar graph display	n/a	· ·							√	
Safety										
<u> </u>	CATILI 1000 V CATIVA	00 V CATIII 1000 V, CATIV 600 V		CAT III 1000 V	CATIVEOU	V		CATILISON	, CATIV 300 \	/
Mis-insertion prevention shutters	CAT III 1000 V, CAT IV C	OO V CATTII 1000 V, CATTV 000 V		n/		•			n/a	
Circuit breaker false trip prevention		n/a		n/			n	ı/a		V
	11/ CL	11/4		11/					1	-

Glossary

Auto AC/DCV : Automatically detects and measures AC and DC voltage. I Peak measurement : After starting PEAK value measurement, check maximum and minimum instantaneous voltage and current values. I Low-pass filter: Cuts high frequency content to provide stable numerical values for measurement. I Display update setting: Reduces the display value update rate to stabilize measurements. I Hold display value: Manual: press the button to freeze the display. Auto: the display freezes automatically when the measurement value is stable. I Max/Min value display: Pressing the MAX/MIN button displays the maximum and minimum displayed measurement values. I Relative display: Pressing the REL button displays subsequent measurements as values relative to that displayed when the button was pressed. I Decibel conversion: Displays AC voltage measurements converted to decibel values (dbm/dbv) I Percentage conversion display: Displays 4 to 20 mA (or 0 to 20 mA) signals converted to 0 to 100% values. For the DT4253, only 4 to 20 mA.

High-End DT4281 / DT4282 (Accuracy guaranteed for 1 year)

DC Voltage		
Range	Accuracy	Input Impedance
60.000 mV	±0.2% rdg. ±25 dgt.	1 GΩ or more // 100 pF or less
600.00 mV	±0.025% rdg. ±5 dgt.	1 Gtz of filore // 100 pr of less
6.0000 V	.0.0050/ #d# .0.d#	11.0 MΩ ±2% // 100 pF or less
60.000 V	±0.025% rdg. ±2 dgt.	10.3 MΩ ±2% // 100 pF or less
600.00 V	±0.03% rdg. ±2 dgt.	10.2 MΩ ±2% // 100 pF or less
1000.0 V	±0.03% fug. ±2 ugi.	10.2 MIX ±2% // 100 pr of less

AC Voltage						
Dongo	Accuracy					
Range	20 Hz to 45 Hz	45 Hz to 65 Hz	65 HZ to 1 kHz	1 kHz to 10 kHz	10 kHz to 20 kHz	20 kHz to 100 kHz
60.000 mV	±1.3% rdg.	±0.4% rdg.	±0.% rdg.	±0.9% rdg.	±1.5% rdg.	±20% rdg. ±80 dgt.
600.00 mV	±60 dgt.	±40 dgt.	±40 dgt.	±40 dgt.	±40 dgt.	±8% rdg. ±80 dgt.
6.0000 V	±1% rdg. ±60 dgt.				±0.7% rdg.	±3.5% rdg.
60.000 V					±40 ugi.	±40 dgt.
600.00 V	Undefined	±25 úgi.	±25 úgi.	±25 úgi.	Undofined	Undofined
1000.0 V					Ondelined	Ondelliled
6.0000 V 60.000 V 600.00 V	±1% rdg. ±60 dgt.	±40 dgt. ±0.2% rdg. ±25 dgt.	±40 dgt. ±0.3% rdg. ±25 dgt.	±40 dgt. ±0.4% rdg. ±25 dgt.		

DC V +	DC V + AC V Measurement						
Range			curacy				
nariye	20 Hz to 45 Hz	45Hz to 65Hz	65 HZ to 1 kHz	1 kHz to 10 kHz	10kHz to 20kHz	20 kHz to 100 kHz	
6.0000 V	±1.2% rdg. ±65 dgt.		±0.4% rdg.		±1.5% rdg. ±45 dqt.	±3.5% rdg. ±125 dgt.	
60.000 V		±0.3% rdg.	±0.4% rdg.	±30 dgt.	±45 úgi.	1120 dgt.	
600.00 V	Undefined	±30 dgt.	gt. ±30 dgt.				
1000.0 V	Ondenned		±0.4% rdg. ±45 dgt.	Undefined	Undefined		
Input impe	dance	1 MΩ ±4%	// 100 pF or le	ess			
Crest factor 3 o		3 or less (1.5 or less for the 1000.0 V range)					
Accuracy	A		5% or more of each range				
Accuracy specification range			,	acy is defined nore, 2% rdg.	only for frequis added.	encies	

DC A Meas	surement	*-	1. DT4282 only
Range	Accuracy / Display update : slow	Accuracy / Display update : normal	Shunt Resistance
600.00 μA		±0.05% rdg. ±25 dgt.	101 O
6000.0 μΑ	±0.05% rdg. ±5 dgt.	±0.05% rdg. ±5 dgt.	101 12
60.000 mA		±0.05% rdg. ±25 dgt.	1.0
600.00 mA	±0.15% rdg. ±5 dgt.	±0.15% rdg. ±5 dgt.	1 12
6.0000 A*1	.0.00/ rda .E dat	±0.2% rdg. ±25 dgt.	10 mQ
10.000 A*1	±0.2% rdg. ±5 dgt.	±0.2% rdg. ±5 dgt.	10 1112

AC A Measurement *1. DT4282 only					DT4282 only	
Danas		Accuracy				
Range	20 Hz to 45 Hz	45 Hz to 65 Hz	65 Hz to 1 kHz	1 kHz to 10 kHz	10 kHz to 20 kHz	
600.00 μΑ	±1.0% rdg. ±20 dgt.	±0.6% rdg. ±20 dgt.	±0.6% rdg. ±20 dgt.	±2% rdg. ±20 dgt.	±4% rdg. ±20 dgt.	
6000.0 μΑ	±1.0% rdg. ±5 dgt.	±0.6% rdg. ±5 dgt.	±0.6% rdg. ±5 dgt.	±2% rdg. ±5 dgt.	±4% rdg. ±5 dgt.	
60.000 mA	±1.0% rdg. ±20 dgt.	±0.6% rdg. ±20 dgt.	±0.6% rdg. ±20 dgt.	±1% rdg. ±20 dgt.	±2% rdg. ±20 dgt.	
600.00 mA	±1.0% rdg. ±5 dgt.	±0.6% rdg. ±5 dgt.	±0.6% rdg. ±5 dgt.	±1.5% rdg. ±10 dgt.	Undefined	
6.0000 A*1	Undefined	±0.8% rdg. ±20 dgt.	±0.8% rdg. ±20 dgt.	Undefined	Undefined	
10.000 A*1	Undefined	±0.8% rdg. ±5 dgt.	±0.8% rdg. ±5 dgt.	Undefined	Undefined	
Shunt resistance μ A Range 101 Ω , mA Range 1 Ω , A Range 10 m Ω				Ω		
Crest factor 3 or less (Note that it applies to 1/2 of the range.))		
Accuracy specification range Accuracy is not defined for measurements below 5% of range					5% of range	

Continuity Check			
Range	Accuracy	Measurement Current	Open-terminal Voltage
600.0 Ω	±0.5% rdg. ±5 dgt.	640 μA ±10%	DC 2.5 V or less
Continuity threshold	20 Ω (default), 50 Ω,	100 Ω, 500 Ω	

Diode Check					
Range		Accuracy	Measurement Current	Open-terminal Voltage	
3.600 V	±0.1% rdg. ±5 dgt.		1.2 mA or less	DC 4.5 V or less	
		0.15 V, 0.5 V (default), 1 V, 1.5 V, 2 V, 2.5 V, 3 V			
Forward threshold		If the reading is lower than the threshold during the forward connection, a buzzer sounds and the red backlight turns on.			

AC Clamp (AC Current)	DT4281 only
Range	Acc	uracy
nange	40 Hz to 65 Hz	65 Hz to 1 kHz
10.00 A	±0.6% rdg. ±2 dgt.	±0.9% rdg. ±2 dgt.
20.00 A	±0.6% rdg. ±4 dgt.	±0.9% rdg. ±4 dgt.
50.00 A	±0.6% rdg. ±10 dgt.	±0.9% rdg. ±10 dgt.
100.0 A	±0.6% rdg. ±2 dgt.	±0.9% rdg. ±2 dgt.
200.0 A	±0.6% rdg. ±4 dgt.	±0.9% rdg. ±4 dgt.
500.0 A	±0.6% rdg. ±10 dgt.	±0.9% rdg. ±10 dgt.
1000 A	±0.6% rdg. ±2 dgt.	±0.9% rdg. ±2 dgt.

	The optional 9010-50, 9018-50, or 9132-50 CLAMP ON PROBE is used.			
	Accuracy does not include the error of the clamp-on probe.			
Crest factor 3 or less				
Accuracy is not defined for measurements below 15% of range				

Resistance Measurement					
Range	Accuracy	Measurement Current	Open-terminal Voltage		
60.000 Ω	±0.3% rdg. ±20 dgt.	640 μA ±10%			
600.00 Ω	±0.03% rdg. ±10 dgt.	040 μΑ ±10%			
6.0000 kΩ		96 μA ±10%			
60.000 kΩ	±0.03% rdg. ±2 dgt.	9.3 μA ±10%			
600.00 kΩ		0.96 μA ±10%	DC 2.5 V or less		
6.0000 MΩ	±0.15% rdg. ±4 dgt.				
60.00 MΩ	±1.5% rdg. ±10 dgt.	96 nA ±10%			
600.0 MO	±3.0% rdg. ±20 dgt.	90 IIA ±10%			
	±8.0% rdg. ±20 dgt.]			

Conductano	e (nS)		DT4282 only
Range Accuracy		Measurement Current	Open-circuit Voltage
600.00 nS	±1.5% rdg. ±10 dgt.	96 nA ±10%	DC 2.5 V or less

Accuracy is defined for humidity 60% RH or less. Accuracy is defined for the range 20nS or more. In the case of 300 nS or more, ±20 dgt. is added.

Capacitance	Capacitance Measurement					
Range	Accuracy	Measurement Current	Open-circuit Voltage			
1.000 nF	±1% rdg. ±20 dgt.		DC 2.5 V or less			
10.00 nF	±1% rdg. ±5 dgt.	004400/				
100.0 nF		32 μA ±10%				
1.000 μF						
10.00 μF			DC 3.1 V or less			
100.0 μF	±2% rdg. ±5 dgt.		DC 3.1 V OI less			
1.000 mF	±2% rug. ±5 ugi.	680 μA ±20%				
10.00 mF			DC 2.1 V or less			
100.0 mF	±2% rdg. ±20 dgt.					

Temperature		
Thermocouple Type	Range	Accuracy
K	-40.0°C to 800.0°C (-40.0°F to 1472.0°F)	±0.5% rdg. ±3°C (5.4°F)

The optional K Thermocouple DT4910 is used. Accuracy does not include the error of the K thermocouple.

Frequency (For AC V, DC + AC V, AC µA, AC mA, AC A)			
Range	Accuracy		
99.999 Hz		±0.005% rdg. +3 dgt.	
999.99 Hz			
9.9999 kHz			
99.999 kHz		0.0050/ miles + 0. dest	
500.00 kHz		±0.005% rdg. +3 dgt.	
Measurement range		0.5 Hz or more ([] is displayed when frequency is less than 0.5 Hz)	
Pulse width		1 μs or more (DUTY ratio is 50%)	
With the filter ON, accuracy is defined only for frequencies 100 Hz or less. (For ACV, DC+ACV)			

Peak Measurement (For AC V, DC V, DC+AC V, Clamp, DC µA, DC mA, DC A, AC µA, AC mA, AC A)				
Main measurement	Signal width	Accuracy		
DC V	4 ms or more (single)	±2.0% rdg. ±40 dgt.		
DC V	1 ms or more (repeated)	±2.0% rdg. ±100 dgt.		
Other than	1 ms or more (single)	±2.0% rdg. ±40 dgt.		
DC V	250 μs or more (repeated)	±2.0% rdg. ±100 dgt.		

Decibel Conversion Measurement : Standard impedance (dBm)

 $4, 8, 16, 32, 50, 75, 93, 110, 125, 135, 150, 200, 250, 300, 500, 600, 800, 900, 1000, 1200 \ \Omega$ (default: 600 Ω)

High-End General Specifications

Durability			
Drop proof	Yes		
Operating temperature and humidity*1	-15°C to 55°C		
Storage temperature and humidity*2	-30°C to 60°C		
Applicable standards	Safety: EN61010, EMC: EN61326; Waterproof and dustproof: IP40		

^{*1. -15°}C to 55°C (5°F to 131°F), Up to 40°C (104°F): at 80% RH or less (non-condensating), 40°C to 45°C (104°F to 113°F): at 60% RH or less (non-condensating), 45°C to 55°C (113°F to 131°F): at 50% RH or less (non-condensating)

Dimensions/Weight

93W × 197H × 53D mm (3.66"W × 7.76"H × 2.09"D), 650 g (23 oz.) (including batteries)

Safety	
Maximum rated voltage between input terminals and ground	CAT III 1000 V, CAT IV 600 V
Maximum rated voltage between terminals	Between the V and COM terminals: 1000 V DC/AC
Maximum rated current between terminals	Between the mA and COM terminals: 600 mA DC/600 mA AC Between the A and COM terminals: 10 A DC/10 A AC

Included accessories

TEST LEAD L9207-10, Instruction Manual, LR6 alkaline battery × 4

New Standard

NEW DT4261

(Accuracy guaranteed for 1 year)

DC Voltage			
Range	Accuracy*1	Input Impedance	
600.0 mV	±0.15% rdg. ±5 dgt.	11.3 MO ± 2.0%	
6.000 V		11.5 MIL2 ± 2.0%	
60.00 V	±0.15% rdg. ±2 dgt.	10.4 MΩ ± 2.0%	
600.0 V		10.3 MO ± 1.5%	
1000 V	±0.15% rdg. ±5 dgt.	10.3 IVIL2 ± 1.5%	
2000 V*2	±0.5% rdg. ±5 dgt.	20 MΩ ± 5.0%	

*1. Add ±1 dgt. when measuring at or below 5% of range
*2. 2000 V is supported only when using the optional DC HIGH VOLTAGE PROBE P2000

AC Voltag	AC Voltage					
Dongo		Accuracy		Innut Impedance		
Range	40 Hz to 500 Hz 500 Hz to 1		500 Hz to 1 kHz	Input Impedance		
6.000 V	±0.9% rdg. ±3 dgt.		. 1 F0/ wda . 0 dat	11.3 M Ω ± 2.0% // 100 pF or less		
60.00 V				10.4 M Ω ± 2.0% // 100 pF or less		
600.0 V	600.0 V ±0.9% rdg	g. ±3 ugi.	±1.5% rdg. ±3 dgt.	10.3 MΩ ± 1.5% // 100 pF or less		
1000 V				10.3 MΩ ± 1.3% // 100 pF of less		
Crest factor		3 at up to 4000 counts and reduces linearly to 2 at 6000 counts. 1000 V range only: 2 at up to 750 counts, linearly decreasing to 1.5 at 1000 counts.				
Accuracy specif	Accuracy specification range		For ACV, minimum 1% of range; add ±5 dgt. when measuring at or below 5% of range.			

DC A Measurement				
Range	Accuracy	Input Impedance		
600.0 mA	±0.5% rdg. ±3 dgt.	35 mΩ ±30%		
6.000 A				
10.00 A				

Accuracy specification range Add ±2 dgt. when measuring at or below 5% of range.

AC A Measurement					
Range		Accuracy		land the land and a second	
nalige	40 Hz to	500 Hz	500 Hz to 1 kHz	Input Impedance	
600.0 mA	±1.4% rdg. ±3 dgt.		±1.8% rdg. ±3 dgt.	35 mΩ ±30%	
6.000 A					
10.00 A					
Crest factor		3 at up to 4000 counts and reduces linearly to 2 at 6000 counts.			
Accuracy speci	fication range	For ACV, minimu	ım 1% of range; add ±5 dgt. when	measuring at or below 5% of range.	

Continuity Check					
Range	Accuracy		Measurement Current	Open-terminal Voltage	
600.0 Ω	±0.7% rdg. ±5 dgt.		Approx. 200 μA	DC 2.0 V or less	
Continuity ON threshold Approx. 25 Ω o		Approx. 25 Ω or	less (continuous buzzer s	sound, red backlight on)	
Continuity OFF threshold		Approx. 245 Ω or	r more (buzzer sound off,	red backlight off)	

Diode Check				
Range	Accuracy		Measurement Current	Open-terminal Voltage
1.800 V	±0.5% rdg. ±5 dgt.		Approx. 200 μA	DC 2.0 V or less
Forward threshold			sound at 0.15 V to 1.8 V 15 V, red backlight on.	, continuous buzzer

AC Clamp (AC Current)				
Dongo	Accı	ıracy		
Range	40 Hz to 500 Hz	500 Hz to 1 kHz		
10.00 A				
20.00 A				
50.0 A				
100.0 A	±0.9% rdg. ±3 dgt. ±1.5% rdg. ±3	±1.5% rdg. ±3 dgt.		
200.0 A				
500 A				
1000 A				

The optional 9010-50, 9018-50, or 9132-50 CLAMP ON PROBE is used. Accuracy does not include the error of the clamp-on probe. 3 or less Crest factor Accuracy specification range | Minimum 1% of range; add ±5 dgt. when measuring at or below 5% of range

Resistance Measurement				
Range	Accuracy	Measurement Current	Open-terminal Voltage	
600.0 Ω	±0.7% rdg. ±5 dgt.	Approx. 200 μA		
6.000 kΩ		Approx. 100 μA	DC 2.0 V or less	
60.00 kΩ	±0.7% rdg. ±3 dgt.	Approx. 10 μA		
600.0 kΩ		Approx. 1 μA	DC 2.0 V of less	
6.000 MΩ	±0.9% rdg. ±3 dgt.	Approx. 100 nA		
60.00 MΩ	±1.5% rdg. ±3 dgt.	Approx. 10 nA		

Accuracy guarantee condition After zero adjustment has been performed

Capacitance Measurement				
Range	Accuracy	Measurement Current	Open-terminal Voltage	
1.000 μF		Approx. 10 nA, 100 nA, 1 μA		
10.00 μF	l	Approx. 100 nA, 1 μA, 10 μA		
100.0 μF	±1.9% rdg. ±5 dgt.	Αρρτοχ. 1 μΑ, 10 μΑ, 100 μΑ	DC 2.0 V or less	
1.000 mF		Approx. 10 μA, 100 μA, 200 μA		
10.00 mF	±5.0% rdg. ±20 dgt.	Approx. 100 μA, 200 μA		

Frequency				
Range	Accuracy			
99.99 Hz				
999.9 Hz	.0.10/ mde1 det			
9.999 kHz	±0.1% rdg. +1 dgt.			
99.99 kHz (V AC Only)				

^{*2. 80%}RH or less (non-condensating)

New Standard **General Specifications**

Durability				
Drop proof	Yes			
Operating temperature and humidity*1	-25°C to 65°C			
Storage temperature and humidity*2	-30°C to 70°C			
Applicable standards	Safety: EN61010, EMC: EN61326; Waterproof and dustproof: IP54*3			

^{*1: 80%} RH or less at up to 40°C (non-condensating), linearly decreases from 80% RH at 40°C to 25% RH or less at 65°C (non-condensating)
*2: 80% RH or less (non-condensating)
*3: Do not use in wet conditions.

Safety	
Maximum rated voltage between input terminals and ground	CAT III 1000 V, CAT IV 600 V
Maximum rated voltage between terminals	Between the V and COM terminals: 1000 V DC/AC
Maximum rated current between terminals	Between the A and COM terminals: 10 A DC/10 A AC

Included accessories

TEST LEAD L9300, Instruction Manual, LR6 alkaline battery $\times 3$

Dimensions/Weight

87W × 185H × 47D mm (3.43"W × 7.28"H × 1.85"D), 480 g (16.9 oz.) (including batteries)

DT4252 / DT4253 / DT4255 / DT4256 Standard

(Accuracy guaranteed for 1 year)

DC Voltage				
Range	Accuracy	Input Impedance		
High precision 600 mV range*1	±0.2% rdg. ±5 dgt.	10.2 MΩ ±1.5%		
600.0 mV	±0.5% rdg. ±5 dgt.	- 11.2 MΩ ±2.0%		
6.000 V				
60.00 V	±0.3% rdg. ±3 dgt.*2	10.3 MΩ ±2.0%		
600.0 V	±0.3% rug. ±3 dgt.	10.2 MQ ±1.5%		
1000 V		10.2 IVIS2 ±1.5%		

^{*1.} DT4252 only *2. DT4252, DT4256 only. DT4252, DT4253 : ±5 dgt.

AC Voltage					
Panga	Accuracy		Input Impedance		
Range	40 Hz to 500 Hz	500 Hz or more to 1 kHz	input impedance		
6.000 V		±1.8% rdg. ±3 dgt.	11.2 MΩ ±2.0% // 100 pF or less		
60.00 V	±0.9% rdg. ±3 dgt.		10.3 MΩ ±2.0% // 100 pF or less		
600.0 V	±0.9% rag. ±3 agi.		10.2 MΩ ±1.5% // 100 pF or less		
1000 V			10.2 WILZ ±1.5% // 100 pr of less		

AUTO V (Identification)			DT4253, DT4255, DT4256 only		
Donne		Accuracy		Input Impedance	
Range	DC, 4	0 Hz to 500 Hz	500 Hz or more to 1 kHz	input impedance	
600.0 V	±2.0% rdg. ±3 dgt.		±4.0% rdg. ±3 dgt.	900 kΩ ±20%	
Crest factor 3		3 at up to 4000 counts and reduces linearly to 2 at 6000 counts.			
Accuracy specification range		For AC V, minimum 1% of range; add ±5 dgt. when measuring at or below 5% of range.			
		With the filter ON,the accuracy is not specified at 100 Hz/500 Hz or more.			

DC A Measurem	ent	DT4252, DT4253, DT4256 only
Range	Accuracy	Input Impedance
• 60.00 μA	±0.8% rdg. ±5 dgt.	1 kΩ ±5%
• 600.0 μA	±0.8% rdg. ±5 dgt.	1 kΩ ±5%
• 6.000 mA	±0.8% rdg. ±5 dgt.	15 Ω ±40%
• • 60.00 mA	±0.8% rdg. ±5 dgt.*1	15 Ω ±40%*1
• 600.0 mA	±0.9% rdg. ±5 dgt.	35 mΩ ±30%
• • 6.000 A	±0.9% rdg. ±3 dgt.*2	35 mΩ ±30%
• • 10.00 A	±0.9% rdg. ±3 dgt.*2	35 mΩ ±30%

[●]DT4252 ●DT4253 ●DT4256

AC A Me	asurement	:		DT4252, DT4256 only
Danga		Accuracy		laasa laaa adaa aa
Range	40 Hz to	500 Hz	500 Hz or more to 1 kHz	Input Impedance
600.0 mA*1	±1.4% rdg. ±5 dgt.		±1.8% rdg. ±5 dgt.	
6.000 A	.1 40/ ro	lg. ±3 dgt.	±1.8% rdg. ±3 dgt.	35 mΩ ±30%
10.00 A	±1.4% 10	ıy. ±3 üyi.	±1.6% rug. ±3 ugi.	
Crest factor	Crest factor 3 at up to 4000 counts and reduces linearly to 2 at 6000 count			nearly to 2 at 6000 counts.
Accuracy specification range Minimum 1% of range; add ±5 dgt. when measuring 300 cou			neasuring 300 counts or less.	

^{*1.} DT4256 only

Electric Charge		DT4255, DT4256 only
Range	Detection voltage range	Detection Target Frequency
Hi	AC 40 V to AC 600 V	50 Hz / 60 Hz
Lo	AC 80 V to AC 600 V	50 HZ / 60 HZ

During voltage detection, a continuous buzzer sounds and the red LED lights up.

	Continuity Check				
Ī	Range	Ad	curacy	Measurement Current	Open-terminal Voltage
	600.0 Ω	±0.7% rdg. ±5 dgt.		Approx. 200 μA	DC 1.8 V or less
-	Continuity ON threshold Approx. 25 Ω		Approx. 25 Ω or	less (continuous buzzer	sound, red LED lights)
	Continuity OFF threshold		Approx. 245 Ω	or more	

Diode Check				
Range		Accuracy	Measurement Current	Open-terminal Voltage
1.500 V	±0.5% rdg. ±5 dgt.*1		Approx. 0.5 mA	DC 5.0 V or less
Forward threshold Buzzer sound intermittently at 0.15 V to 1.5 V, the red LED flashes.				
*1. DT4255 : ±0.5% rdg. ±8 dgt.				

AC Clamp (AC Current)	DT4253, DT4255, DT4256 only	
Dange	Accuracy	
Range	40 Hz to 1 kHz	
10.00 A		
20.00 A		
50.0 A		
100.0 A	±0.9% rdg. ±3 dgt.	
200.0 A		
500 A		
1000 A	1	

The optional 9010-50, 9018-50, or 9132-50 CLAMP ON PROBE is used. Accuracy does not include the error of the clamp-on probe.			
Crest factor	3 or less		
Accuracy specification range Minimum 1% of range; add ±5 dgt. when measuring at or below 5% of range.			

Resistance M	Resistance Measurement			
Range	Accuracy	Measurement Current	Open-terminal Voltage	
600.0 Ω	±0.7% rdg. ±5 dgt.	Approx. 200 μA		
6.000 kΩ		Approx. 100 μA		
60.00 kΩ	±0.7% rdg. ±3 dgt.*1	Approx. 10 μA	DC 1.8 V or less	
600.0 kΩ		Approx. 1 μA	DC 1.8 v or less	
6.000 MΩ	±0.9% rdg. ±3 dgt.*1	Approx. 100 nA		
60.00 MΩ	±1.5% rdg. ±3 dgt.*1	Approx. 10 nA		

Accuracy guarantee condition After zero adjustment has been performed.

*1. DT4252, DT4253 : ±5 dgt.

Capacitance Measurement			
Range	Accuracy	Measurement Current	Open-terminal Voltage
1.000 μF		Approx. 10 nA, 100 nA, 1 μA	
10.00 μF	±1.9% rdg. ±5 dgt.	Approx. 100 nA, 1 μA, 10 μA	
100.0 μF		Approx. 1 μA, 10 μA, 100 μA	DC 1.8 V or less
1.000 mF		Αρρτοχ. 10 μΑ, 100 μΑ, 200 μΑ]
10.00 mF	±5.0% rdg. ±20 dgt.	Approx. 100 μA, 200 μA	
		•	

^{*1.} DT4256: $\pm 1.8\%$ rdg. ± 15 dgt. Input Impedance: 35 m Ω $\pm 30\%$ *2. DT4252: $\pm 0.9\%$ rdg. ± 5 dgt.

Temperature		DT4253 only
Thermocouple Type	Range	Accuracy
K	-40.0°C to 400.0°C (-40.0°F to 752.0°F)	±0.5% rdg. ±2°C

The optional K Thermocouple DT4910 is used. Accuracy does not include the error of the K thermocouple.

Frequency	
Range	Accuracy
99.99 Hz	
999.9 Hz	0.40% miles and alest
9.999 kHz	±0.1% rdg. +1 dgt.
99.99 kHz (V AC only)	

Standard **General Specifications**

Durability	
Drop proof	Yes
Operating temperature and humidity*1	-25°C to 65°C (DT4254, DT4255, DT4256) -10°C to 50°C (DT4252, DT4253)
Storage temperature and humidity*2	-30°C to 70°C (DT4254, DT4255, DT4256) -30°C to 60°C (DT4252, DT4253)
Applicable standards	Safety: EN61010, EMC: EN61326; Waterproof and dustproof: IP42

- *1. -10°C to 50°C(14°F to 122°F), Up to 40°C(104°F): at 80% RH or less(non-condensating), 40°C to 45°C (104°F): at 80% RH or less (non-condensating), 45°C to 55°C (113°F to 131°F): at 50% RH or less (non-condensating), *1. Up to 40°C(104°F): at 80% RH or less (non-condensating)
- 40°C to 65°C (104°F to 149°F): reduces linearly 80% RH to 25% RH or less
- *2. 80% RH or less (non-condensating)

Safety	
Maximum rated voltage between input terminals and ground	CAT III 1000 V, CAT IV 600 V
Maximum rated voltage between terminals	Between the V and COM terminals: DC 1000 V, AC 1000 V
Maximum rated current between terminals	Between the A and COM terminals: DC 10 A / AC 10 A (DT4252, DT4256) Between the μA ,mAand COM terminals: DC 60 mA (DT4253 only)

Your instrument can be used to measure voltages in excess of 1000 V DC if and only if both of the following conditions are satisfied:

1. The circuit under measurement is isolated from the commercial power grid.

2. The circuit under measurement is isolated from ground.

Dimensions/Weight

 $84W \times 174H \times 52D$ mm (3.31"W × 6.85"H × 2.05"D), 390 g (13.8 oz.) (including batteries and holster)

Included accessories

TEST LEAD L9207-10, Instruction Manual, LR03 Alkaline battery × 4, Holster (attached to the instrument, with a test lead holder)

Pocket

DT4221 / DT4222 / DT4223 / DT4224

(Accuracy guaranteed for 1 year)

DC Voltage		
Range	Accuracy	Input Impedance
600.0 mV	±0.5% rdg. ±5 dgt.	11.2 MO ±2.0%
6.000 V		11.2 WILZ ±2.0 /6
60.00 V		10.3 MΩ ±2.0%
600.0 V		10.2 MΩ ±1.5%

AC Voltage			
Range	Accuracy		lanut Impedance
nange	40 Hz to 500 Hz	500 Hz or more to 1 kHz	Input Impedance
6.000 V		±2.5% rdg. ±3 dgt.	11.2 MΩ ±2.0% // 100 pF or less
60.00 V	±1.0% rdg. ±3 dgt.	1.0% rdg. ±3 dgt. ±2.0% rdg. ±3 dgt.	10.3 MΩ ±2.0% // 100 pF or less
600.0 V			10.2 MΩ ±1.5% // 100 pF or less
Crest factor	3 at up to 4000 counts and reduces linearly to 2 at 6000 counts.		
Accuracy	For AC V, minimum 1% of range; add ±5 dgt. when measuring at or below 5% of rar With the filter ON,the accuracy is not specified in 100/500 Hz or mo		en measuring at or below 5% of range.
specification range			pecified in 100/500 Hz or more.

AUTO V (Identification)		DT42	21, DT4223 only
Dongo	Accuracy		Innut Impedance
Range	DC, 40 Hz to 500 Hz	500 Hz or more to 1 kHz	Input Impedance
600.0 V	±2.0% rdg. ±3 dgt.	±4.0% rdg. ±3 dgt.	900 kΩ ±20%
Crest factor	3 at up to 4000 counts and reduces linearly to 2 at 6000 counts.		
Accuracy	For AC V, minimum 1% of range; add ±5 dgt. when measuring at or below 5% of range		
specification range	With the filter ON,the ac	ocuracy is not specified in 1	00/500 Hz or more.

Electric Charge	DT4221, DT4223 only
Detection Voltage Range	Detection Target Frequency
AC 80 V to AC 600 V	50 Hz / 60 Hz

During voltage detection, a continuous buzzer sounds.

Continuity Check				
Range	Accu	racy	Measurement Current	Open-terminal Voltage
600.0 Ω	±1.0% rdg. ±5 dgt.		Арргох. 200 µА	DC 1.8 V or less (DT4221, DT4222) DC 2.0 V or less (DT4223, DT4224)
Continuity ON threshold Continuity OFF threshold		Approx. 25 C	Ω or less (continuous Ω or more	buzzer sound)
The second of th				

Diode Check		DT	4222, DT4224 only
Range	Accuracy	Measurement Current	Open-terminal Voltage
1.500 V	±0.9% rdg. ±5 dgt.	Approx. 0.5 mA (DT4222) Approx. 0.2 mA (DT4224)	DC 2.5 V or less

Resistance Measurement		DT4222, DT422	3, DT4224 only	
Range	Acc	uracy	Measurement Current	Open-terminal Voltage
600.0 Ω			Approx. 200 μA	
6.000 kΩ				DC 1.8 V or less
60.00 kΩ	±0.9% rdg. ±5 dgt.		Approx. 10 μA	(DT4222)
600.0 kΩ			Approx. 1 μA	DC 2.0 V or less
6.000 MΩ			Approx. 100 nA	(DT4223, DT4224)
60.00 MΩ	±1.5% rdg. ±5 dgt.		Approx. 10 nA]
Accuracy guarantee condition		After zero adju	ıstment has been perf	formed.

Capacitance Measurement		DT422	2, DT4224 only
Range	Accuracy	Measurement Current	Open-terminal Voltage
1.000 uF		Approx. 10 nA. 100 nA. 1 uA	

	Approx. 10 nA, 100 nA, 1 μA		1.000 μF
DC 1.8 V or less	Approx. 100 nA, 1 μA, 10 μA	±1.9% rdg. ±5 dgt.	10.00 μF
(DT4222)	Αρρτοχ. 1 μΑ, 10 μΑ, 100 μΑ		100.0 μF
DC 2.0 V or less (DT4223, DT4224)	Αρρτοχ. 10 μΑ, 100 μΑ, 200 μΑ		1.000 mF
[(= : :=== :,	Approx. 100 μA, 200 μA	±5.0% rdg. ±20 dgt.	10.00 mF

Frequency	
Range	Accuracy
99.99 Hz	
999.9 Hz	±0.1% rdg. +2 dgt.
9.999 kHz	

Pocket General Specifications

Durability	
Drop proof	Yes
Operating temperature and humidity*1	-10°C to 50°C (DT4221, DT4222) -10°C to 65°C (DT4223, DT4224)
Storage temperature and humidity*2	-30°C to 60°C (DT4221, DT4222) -30°C to 70°C (DT4223, DT4224)
Applicable standards	Safety: EN61010, EMC; EN61326, Waterproof and dustproof: IP42

- *1. -10°C to 50°C(14°F to 122°F), Up to 40°C(104°F): at 80% RH or less (non-condensating), 40°C to 45°C (104°F to 113°F): at 60% RH or less (non-condensating), 45°C to 65°C (113°F to 122°F): at 50% RH or less (non-condensating)
- *2. 80% RH or less (non-condensating)

Dimensions/Weight

 $72W\times149H\times38D$ mm (2.83″W $\times5.87''H\times1.50''D),$ 190 g (6.7 oz.) (including batteries and holster)

Safety	
Maximum rated voltage between input terminals and ground	CAT III 600 V, CAT IV 300 V
Maximum rated voltage between terminals	Between the V and COM terminals: 600 V DC/AC

Included accessories

TEST LEAD DT4911, Instruction Manual, LR03 Alkaline battery \times 1, Holster (attached to the instrument, with a test lead holder)

Models



	High-end models	
Model no. (order code)	DT4281	DT4282

NEW 5000-1

	New standard model	
Model no. (order code)	DT4261	DT4261-90*
		*72210 cot product

*Z3210 set product



	Standard models			
Model no. (order code)	DT4252	DT4253	DT4255	DT4256



	Pocket models			
Model no. (order code)	DT4221	DT4222	DT4223	DT4224

Accessories/Options

L9300 / L9207-10 / DT4911 Options (Included accessories)

DT4261 (Included accessory)



TEST LEAD L9300

Cable length 95 cm (3.12 ft) Integrated cap and protective finger guard

Exposed tip metal pin: short CATIII 1000 V, CATIV 600 V Exposed tip metal pin: long

DT4280/DT4250 Series (Included accessory)



TEST LEAD L9207-10

Cable length 90 cm (2.95 ft) with one each red and black caps

with cap
CAT III 1000 V, CAT IV 600 V
without cap
CAT II 1000 V

DT4220 Series (Included accessory)



TEST LEAD DT4911

Cable length 54 cm (1.77 ft) with one each red and black caps

with cap
CAT IV 300 V, CAT III 600 V
without cap
CAT II 600 V

The L4933 and L4934 can be attached to the tip of the L9300, L9207-10 and DT4911. When attaching them, make sure they are in the measuring category-II-state (with the caps removed for the L9207-10 and DT4911).





Option for DT4261: DC HIGH VOLTAGE PROBE P2000



DC HIGH VOLTAGE PROBE P2000

P2000 Specifications

Maximum input voltage	DC 2000 V (max. rated voltage between INPUT H-INPUT L)
Maximum rated voltage to earth	2000 V (Measurement Category III) anticipated transient overvoltage 15,000 V 1000 V (Measurement Category IV) anticipated transient overvoltage 12,000 V
Input resistance	20 MΩ ±1.0% (between INPUT H – INPUT L)
Output ratio	Depends on the input impedance of the connected device (example: $1/10$ when a device with an input impedance of $10~\text{M}\Omega$ is connected)
Overload protection	DC/AC 2200 V 1 minutes (between INPUT H – INPUTO L) DC/AC 600 V 1 minutes (between OUTPUT H – OUTPUT L)
Secondary terminal	4 mm banana terminal

Operating environment	Indoor use, pollution degree 2, altitude up to 2000 m	
Operating temperature and humidity range	Temperature: -25°C to 65°C (-13°F to 149°F). Up to 80% RH (non-condensing) Humidity: -25°C to 40°C (-13°F to 104°F), up to 80% RH (non-condensing) 40°C to 65°C (104°F to 149°F), (the operation humidity limit falls linearly from 40°C 80% RH to 65°C 25% RH, given that there is no condensation)	
Storage temperature and humidity range	-30°C to 70°C (-22°F to 158°F) 90% RH or less (non-condensing)	
Applicable standards	Safety EN 61010	
Product warranty period	3 years (probe body and cable part are not covered by warranty)	
Included accessories	L4943 connection cable*, Strap belt, Strap buckles x 2, C0205 carrying case, "Instruction Manual", "Usage Precautions"	

*L4930, L4931 can be used to extend the cable

L4930 Options

Compatible DMMs: DT4261, DT4250 Series, DT4280 Series



CONNECTION CABLE L4930

Length: 1.2 m (3.937 ft)

Probe tips (at right) can be used on L4930 connection cables.











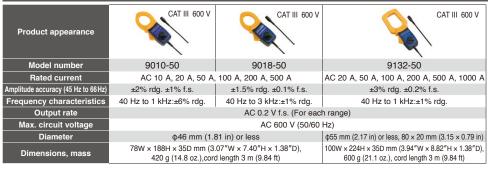




CAT III 1000 V MAGNETIC ADAPTER SET L4937



AC CLAMP ON PROBES for DT4281, DT4261, DT4253, DT4255, DT4256 (Adapter 9704 required for connection)



Adapter Model 9704 is required to connect AC CLAMP ON PROBES 9010-50, 9018-50 and 9132-50 to the DT4281, DT4261, DT4253, DT4255, DT4256.



CONVERSION ADAPTER 9704

Other options



THERMOCOUPLES (K) DT4910

- · Thermal junction form: exposed weld
- Sensor length: approx. 800 mm Measurement temperature range -40 to 260°C
- · Allowable tolerance: ±2.5°C



COMMUNICATION PACKAGE (USB) DT4900-01

- Communication cable
- Communication adapter
- PC software
- · Instruction manual OS: Windows 10



MAGNETIC MAGNETIC STRAP STRAP Z5004 Z5020



WIRELESS ADAPTER Z3210

For DT4261 Enables Bluetooth® communication





CARRYING CASE C0200

DT4220 Series



CARRYING CASE C0202

DT4250, DT4280 Series, DT4261



CARRYING CASE C0201

DT4250 Series



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CARRYING CASE C0207

Bag type for use with all field products

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