

UT15B PRO/UT17B PRO is highly reliable, safe, durable, true RMS multimeter with CAT III 1000V/CAT IV 600V rating, equipped with its built-in VFC, it can filter the carrier frequency interference from voltage signals, resulting in a more stable output voltage.

UT15B PRO/UT17B PRO provide full range mis-operation protection, and 8kV transient protection, to protect against surge voltage and lightning strike.

# UT15B PRO/UT17B PRO

UNI-T



UT15B PRO



UT17B PRO



# UT15B PRO/UT17B PRO Back Side and PCBA

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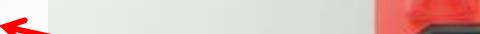
Flashlight



Slot to hold test lead



2pcs 1.5V AA  
Alkaline battery



1pc screw, easy to  
open



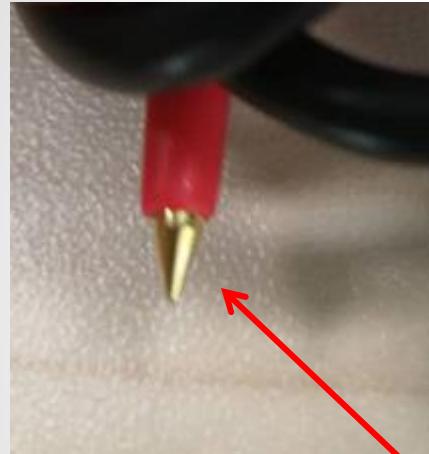
Overmold for better  
stability



Good varistors and  
PTCs protection

Φ10×38mm, 11A,  
1000V, 30kA fuse

Φ10×35mm, 440mA,  
1000V, 30kA fuse



Gold plating



±0.4%  
accuracy



## Main Features (UT15B PRO/UT17B PRO):

- Display count 6000
- True RMS
- CAT III 1000V/CAT IV 600V
- 1000V DC/AC voltage measurement
- 600V frequency conversion voltage
- 10A DC/AC current measurement
- 60MΩ resistance measurement
- 6000uF capacitance measurement
- Diode/continuity test
- Maximum/Minimum/Relative mode
- Flashlight, automatic backlight
- Accuracy guarantee range: 1%-100% of range
- Mis-operation protection
- 8kV transient protection

## Main Features (UT17B PRO only):

- 100kHz frequency measurement
- Duty cycle
- Temperature measurement (0.1C resolution)

True RMS can accurately read different waveforms in applications such as motor inverters, air conditioners, etc. The difference between True RMS meter and average response meter can be found below:

Waveform	True RMS type <b>TRUE RMS</b>	Averaging value type
	✓ correct reading	✓ correct reading
	✓ correct reading	higher reading
	✓ correct reading	lower reading
	✓ correct reading	lower reading

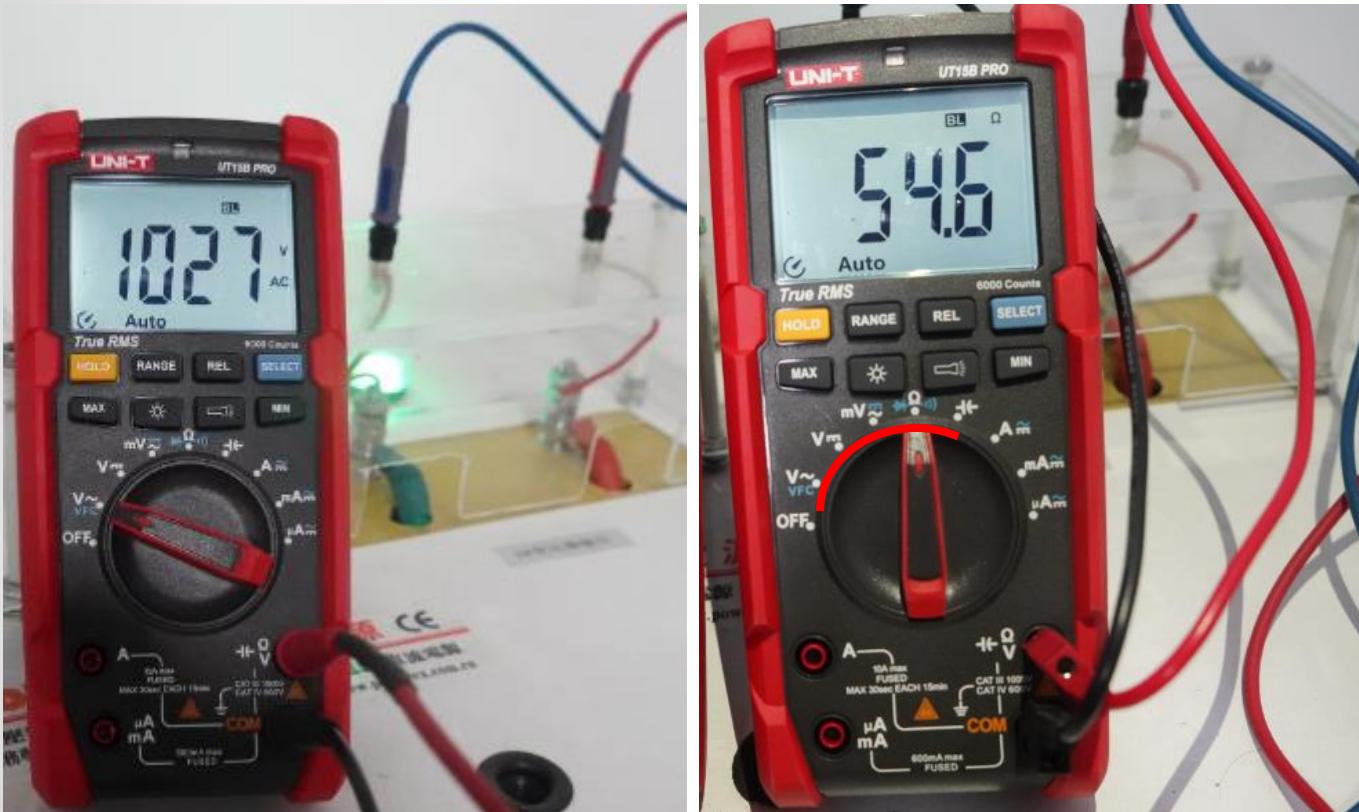


True RMS measurement

Average measurement

# UT15B PRO/UT17B Main Feature – Full Range Mis-operation protection

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Example: The AC voltage is 1027V, and you rotate to wrong position range. Some multimeters might be damaged if you rotate to the wrong range when you are testing high voltage. UT15B PRO/UT17B PRO will provide full range protection to protect your meter when mis-operation occurs. (In current range, over current will break the fuse).



Traditional Non-VFC meter when testing variable frequency (meter on the left in picture) voltage/frequency:

1. Measured value will be higher than the true value
2. High voltage and rapid rise pulse might make the reading unstable
3. Measured frequency (motor RPM) is unstable

VFC meter (meter on the right in picture) will show the true voltage.

Measurement variable-frequency drive output voltage

# UT15B PRO/UT17B Main Feature – Quickly, Accurate, Stable Measurement

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Example: 20MΩ resistance measurement with competitor



UT15B PRO/UT17B PRO Main Competitors: Fluke F15B+/ Fluke F17B+

# UT15B PRO/UT17B PRO and Fluke F15B+/Fluke F17B+ Pictures

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Mode No	UT15BPRO	Fluke F15B+	UT17BPRO	Fluke F17B+
Pictures				

# UT15B PRO/UT17B PRO and Fluke F15B+/Fluke F17B+ Spec Comparison

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Model No	Fluke F15B+	UT15B PRO	Fluke F17B+	UT17B PRO
Display count	4000	6000	4000	6000
Safety rating	CAT II 1000V/CAT III 600V	CAT III 1000V/CAT IV 600V	CAT II 1000V/CAT III 600V	CATIII 1000V/CAT IV 600V
DC (V)	400mV/4V/40V/400V/1000V	600mV/6V/60V/600V/1000V	400mV/4V/40V/400V/1000V	600mV/6V/60V/600V/1000V
AC (V)	400mV/4V/40V/400V/1000V	600mV/6V/60V/600V/1000V	400mV/4V/40V/400V/1000V	600mV/6V/60V/600V/1000V
VFC		600V		600V
DC (A)	400uA/4000uA/40mA/400mA/ 4A/10A	600uA/6000uA/ 60mA/600mA/6A/10A	400uA/4000uA/40mA/400mA/ 4A/10A	600uA/6000uA/ 60mA/600mA/6A/10A
AC (A)	400uA/4000uA/40mA/400mA/ 4A/10A	600uA/6000uA/ 60mA/600mA/6A/10A	400uA/4000uA/40mA/400mA/ 4A/10A	600uA/6000uA/ 60mA/600mA/6A/10A
Resistance (Ω)	400Ω/4kΩ/40kΩ/400kΩ/ 4MΩ/40MΩ	600Ω/6kΩ/60kΩ/600kΩ/ 6MΩ/60MΩ	400Ω/4kΩ/40kΩ/400kΩ/ 4MΩ/40MΩ	600Ω/6kΩ/60kΩ/600kΩ/ 6MΩ/60MΩ
Capacitance (F)	40nF/400nF/4uF/40uF/400uF/ 1000uF	6nF/60nF/600nF/6uF/600uF/ 6000uF	40nF/400nF/4uF/40uF/400uF/ 1000uf	6nF/60nF/600nF/6uF/600uF/ 6000uF
Frequency (Hz)	X	X	50Hz-100kHz	10~100kHz
Duty cycle	X	X	✓	✓
Temperature	X	X	-55~500°C	-55~500°C/-67~932F
Max/Min	X	✓	✓	✓
Relative mode	X	✓	✓	✓
Auto backlight	X	✓	X	✓
Flashlight	X	✓	X	✓
Overload indication	X	✓	✓	✓