

Digital Multimeter Technical Specifications

Standard conditions: The environment temperature is 18°C to 28°C, the relative humidity is less than 80%.

Note: "T" in the model indicates true RMS (optional).

35 series multimeter

Function		Measurement Range	Resolution	Accuracy
DC Voltage (V)	mV	60.00mV/600.0mV	0.01 mV	±(0.5%+2dig)
	V	60.00mV/600.0mV/6.000V/60.00V	0.1 mV	
		600.0V/1000V	0.1 V	
AC Voltage (V)	mV	60.00mV/600.0mV	0.01 mV	±(0.8%+2dig)
	V	60.00mV/600.0mV/6.000V/60.00V	1 mV	±(0.8%+2dig)
		600.0V/750V	0.1 V	±(1%+3dig)
DC Current (A)	μA	600.0μA	0.1 μA	±(0.8%+2dig)
	mA	600.0μA/6.000mA/60.00mA/ 600.0mA/6.000A	0.01 mA	±(0.8%+2dig)
		A	20.00A ^[1]	1 mA

[3] When measuring frequency, the typical waveform is Square or Sine. The signal meets the following conditions.

Frequency	Amplitude (rms)
1 Hz – 4 MHz	≥ 300 mV
4 MHz – 8 MHz	≥ 600 mV
8 MHz – 10 MHz	≥ 750 mV

[4] When measuring duty cycle, the typical waveform is Square.

B41T(+) multimeter

Function		Measurement Range	Resolution	Accuracy		
DC Voltage (V)	mV	220mV	0.01 mV	±(0.1%+5dig)		
	V	2.2V	0.1 mV	±(0.1%+2dig)		
		22V	1 mV			
		220V	10 mV			
		1000V	0.1 V			
				±(0.1%+5dig)		
AC Voltage (V)	mV	220mV	0.01 mV	≤1kHz	±(1.0%+10dig)	
				>1kHz	±(1.5%+50dig)	
	V	2.2V	0.1 mV	≤1kHz	±(0.8%+10dig)	
				>1kHz	±(1.2%+50dig)	
		22V	1 mV	≤1kHz	±(0.8%+10dig)	
				>1kHz	±(1.2%+50dig)	
		220V	10 mV	≤1kHz	±(0.8%+10dig)	
				>1kHz	±(2.0%+50dig)	
	750V	0.1 V	≤1kHz	±(1.2%+10dig)		
			>1kHz	±(3.0%+50dig)		
	DC Current (A)	μA	220μA	0.01 μA	±(0.5%+10dig)	
			2200μA	0.1 μA		
mA		22mA	1 μA	±(0.8%+10dig)		
		220mA	10 μA			
A		20.00A [1]	1 mA	±(2%+25dig)		
AC Current (A)	μA	220μA	0.01 μA	≤1kHz	±(0.8%+10dig)	
				>1kHz	±(1.2%+50dig)	
		2200μA	0.1 μA	≤1kHz	±(0.8%+10dig)	
				>1kHz	±(1.2%+50dig)	
	mA	22mA	1 μA	≤1kHz	±(1.2%+10dig)	
				>1kHz	±(1.5%+50dig)	
		220mA	10 μA	≤1kHz	±(1.2%+10dig)	
				>1kHz	±(1.5%+50dig)	
	A	20.00A [1]	1 mA	≤1kHz	±(1.5%+10dig)	
				>1kHz	±(2.0%+50dig)	
	Resistance [2] (Ω)	220Ω		0.01 Ω	±(0.5%+10dig)	
		2.2kΩ		0.1 Ω		
22kΩ		1 Ω				
220kΩ		10 Ω				
2.2MΩ		100 Ω	±(0.8%+10dig)			

	22MΩ	1.2 kΩ	±(1.5%+10dig)
	220MΩ	100 kΩ	±(5.0%+10dig)
Capacitance (F)	22nF	1 pF	±(3.0%+5dig)
	220nF	10 pF	
	2.2μF	100 pF	
	22μF	1 nF	
	220μF	10 nF	
	2.2mF	100 nF	±(4.0%+10dig)
	>220mF ^[3]	Undefined	Undefined
Frequency ^[4] (Hz)	22.00Hz	0.01 Hz	±(0.1%+4dig)
	220.0Hz	0.1 Hz	
	22.000kHz	1 Hz	
	220.00kHz	10 Hz	
	2.2000MHz	0.1 kHz	
	22.000MHz	1 kHz	
	≤220MHz	0.01MHz	Undefined
Duty Cycle ^[5] (%)	5.0% - 94.9% (Typical: V _{rms} =1V, f=1kHz)	0.1%	±(1.2%+3dig)
	5.0% - 94.9% (≥1 kHz)		±(2.5%+3dig)
Temperature (°C/°F)	-50 °C to 400 °C	0.1 °C	±(1.0%+5°C)
	-58 °F to 752 °F	0.1 °F	±(1.2%+6°F)

[1] When measuring current, for 10 A to 15 A, the measuring duration should not be over 2 minutes within 10 minutes, and in this 10 minutes, no other current should flow through except within the measuring duration; for 15 A to 20 A, the measuring duration should not be over 10 seconds within 15 minutes, and in this 15 minutes, no other current should flow through except within the measuring duration.

[2] Without relative operation, add ±0.50 Ω additional error in resistance function.

[3] When measuring capacitance, for the 220 mF range, the measuring duration should be over 25 seconds.

[4] When measuring frequency, the typical waveform is Square or Sine. The signal meets the following conditions.

Frequency	Amplitude (rms)
1 Hz – 4 MHz	≥ 300 mV
4 MHz – 8 MHz	≥ 600 mV
8 MHz – 10 MHz	≥ 750 mV

[5] When measuring duty cycle, the typical waveform is Square.

Characteristics	Instruction	
Display	35 series	6000
	B41T(+)	22000
Frequency Response (Hz)	The model without "T"	(40 - 400) Hz

	The model with "T"	35 series	(40 - 1000) Hz
		B41T(+)	(40 - 10000) Hz
Sample rate for digital data	35 series	3 times/second	
	B41T(+)	2 times/second	
Sample rate for analog bar graph	35 series	30 times/second	
	B41T(+)	Undefined	
Bluetooth	B35(T)(+)	√	
	B41T(+)		
	D35(T)	Without	
Auto ranging	√		
True RMS	The model with "T" has this function.		
Diodes Test	√		
Measuring Transistor	35 series	√	
	B41T(+)	Without	
Sleep Mode	√		
Continuity Test	√		
Low battery indication	√ (The "⊕-⊖" is displayed when the battery is under the proper operation range.)		
Data Hold	√		
Relative Measurement	√		
MAX/MIN Value	√		
LCD Backlight	√		
Analog bar graph	35 series	61 Segments	
	B41T(+)	45 Segments	
Input Protection	√		
Input Impedance	10 MΩ		
Battery	3 V (1.5 V × 2) AA alkaline batteries		
LCD Size	69 mm * 52 mm		
Weight (without package)	0.32 kg		
Dimension	85 mm * 185 mm * 30 mm		
Working temperature	0°C to 40°C		
Storage temperature	-10°C to 60°C		
Relative Humidity	≤ 80%		
Altitude	Operating: 3,000 m Non-operating: 15,000 m		

Interval Period of Adjustment:

One year is recommended for the calibration interval period.



7007020100045

V1.8