



Fluke 500 Series Battery Analyzers



Overview Features Specifications Models and Accessories More Info

Functions	Range	Resolution	Accuracy	BT508	BT510	BT520	BT521
Battery resistance ¹	3 mΩ	0.001 mΩ	1% + 8	●	●	●	●
	30 mΩ	0.01 mΩ	0.8% + 6	●	●	●	●
	300 mΩ	0.1 mΩ	0.8% + 6	●	●	●	●
	3000 mΩ	1 mΩ	0.8% + 6	●	●	●	●
Vdc	6 V	0.001 v	0.09% + 5	●	●	●	●
	60 V	0.01 v	0.09% + 5	●	●	●	●
	600 V	0.1 v	0.09% + 5	●	●	●	●
	1000 v	1V	0.09% + 5				●
Vac (45 Hz to 500 Hz with 800 Hz filter)	600 v	0.1 v	2% + 10		●	●	●
Frequency (displayed with Vac and Aac) ²	500 Hz	0.1 Hz	0.5% + 8		●	●	●
AC voltage ripple (20KHz Max)	600 mV	0.1 mV	3% + 20		●	●	●
	6000 mV	1 mV	3% + 10		●	●	●
Adc/Aac (with accessory Fluke i410)	400 A	1 A	3.5% + 2				●
Temperature	0°C to 60°C	1°C	2°C (4 °F)				●
Meter mode	999 records for each measurement position with time stamp						
Sequence mode	Up to 100 profiles and 100 profile templates (Each profile stores up to 450 batteries) with time stamp						
¹ The measurement is based on ac injection method. The injected source signal is < 100 mA, 1 kHz. ² Trigger level VAC: 10 mV, Aac: 10 A							

Measurement Modes	BT508	BT510	BT520	BT521
Resistance (mΩ)	●	●	●	●
Battery voltage	●	●	●	●
Voltage dc	●	●	●	●
Voltage ac and frequency (Hz)		●	●	●
Ripple volt		●	●	●
Temperature of negative battery post				●
DC and ac current (and frequency)				●
DMM mode		●	●	●
Sequence mode		●	●	●

Discharge measurement mode		●	●	●
Automatic measurement save		●	●	●
Wireless communication				●
Memory view		●	●	●

General Specifications	
Size (HxWxD)	22 cm x 10.3 cm x 5.8 cm (9 in x 4 in x 2 in)
Weight	850 g (1.9 lb)
Screen dimensions	7.7 cm x 5.6 cm (3 in x 2.2 in)
Interface	USB mini

Environment Specifications	
Operating temperature	0°C to 40°C
Storage temperature	-20°C to 50°C
Lithium-ion battery charging temperature	0°C to 40°C
Operating humidity	Non-condensing (10°C)
	<=80% RH (at 10°C to 30°C)
	<=75% RH (at 30°C to 40°C)
Operating altitude	Sea level to 2000 meters
Storage altitude	Sea level to 12,000 meters
IP rating	IP40
Radio	FCC Class A
Vibration requirements	MIL-PRF-28800F: Class 2
Drop test requirements	1 meter
Temperature coefficients	Add 0.1 x specified accuracy for each degree C above 28°C or below 18°C
Safety compliance	600 V CAT III
EMC	IEC 61326
ROHS	China, Europe
Protection class 2	Pollution Degree II
Battery compliance	UN38.3
	UL2054
	IEC62133
	2G per IEC68-2-26, 25G, and 29