

Battery Analyzer

➤ **Fluke BT521 Battery Analyzer**

The ideal test tool for maintenance, troubleshooting and performance testing of individual stationary batteries and battery banks used in critical battery back-up applications.

1. Fluke BT521 Battery Analyzer



➤ **Key Features**

The ideal test tool for maintenance, troubleshooting and performance testing of individual stationary batteries and battery banks used in critical battery back-up applications

- Key measurements – Internal battery resistance, dc and ac voltage, dc and ac current, ripple voltage, frequency and temperature.
- Sequence measurement mode – Automatic or manual sequence testing of battery strings with automatic measurement storage including voltage, resistance and temperature (with BTL21 intelligent test probe), eliminating the need to press a button each time a measurement needs to be saved.
- Comprehensive logging – All measured values are automatically captured during testing and can be reviewed on the instrument before downloading for on-the-go analysis.

• **Specifications**

	Range	Resolution	Accuracy
Battery Resistance / Strap Resistance ¹	3 mΩ	0.001 mΩ	1% + 8
			1% +68
	30 mΩ	0.01 mΩ	0.8% + 6
			0.8%+12
	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	1 V	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 (20 KHz 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)

Measurement Modes	BT521
Resistance (mΩ)	●
Battery voltage	●
Voltage DC	●
Voltage AC and frequency (Hz)	●
Ripple volt	●

Temperature of negative battery post (using BTL21 straight probes)	•
DC and AC current (and frequency)	•
DMM mode	•
Sequence mode	•
Discharge measurement mode	•
Automatic measurement save	•
Wireless communication	•
Memory view	•

General Specifications - Battery Analyzer

Size (H x W x D)	22 x 10.3 x 5.8 cm (9 x 4 x 2 in)
Weight	850 g (1.9 lb)
Screen dimensions	7.7 x 5.6 cm (3 x 2.2 in)
Interface	USB mini
Warranty	3 years

General Specifications - BTL20ANG Angled Measurement Probe

Long angled probe (overall length)	242.2 cm (95.38 in)
Short angled probe (overall length)	216.8 cm (85.38 in)
Overall span (coil relaxed)	10.1 cm (4 in)
Overall maximum span (coil extended)	109.2 cm (43 in)
BTL20ANG probe tip angle	20 degrees from horizontal

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

2 G per IEC68-2-26, 25 G, and 29