TECHNICAL DATA

Fluke 6500-2 Portable Appliance Tester

Key features

Fluke Simplifies Portable Appliance Testing

- Dedicated key for each test for ‘one-touch’ testing
- Complies with the new standards BS EN 50678 and BS EN 50699
- Pre-set pass/fail levels to save time
- Large backlit display for easy reading
- Single mains socket for appliance connection
- Separate IEC socket for easy mains/extension lead testing
- Detachable test leads for quick field replacement
- Integral carrying handle
- USB port for data transfer
- Integral QWERTY keyboard for rapid data entry
- Additional USB memory capability for back-up data storage and transfer to PC
- Large backlit graphics display
- Pre-set, auto-test sequences for user convenience
- Integral site, location and description codes for faster data processing
- Memory review facility for more on-site control
- USB port for data transfer

Product overview: Fluke 6500-2 Portable Appliance Tester

Perform More Tests Each Day

The Fluke 6500-2 PAT tester is a low weight, small size, one-touch solution with redesigned auto-test capabilities to help you increase the number of portable appliance tests completed each day. The 6500-2 is designed to enable you to work faster without compromising test results.

One-Touch Solution…

Pre-set test routines are initiated from a single button. This not only simplifies testing but also facilitates a faster, more efficient way of working. The fully automatic 6500-2 also includes user-definable test routines and a QWERTY keyboard for rapid data entry.

Low Weight…

Weighing approximately 3 kg, the 6500-2 is lightweight and easy to carry when working on-site. The hard rugged carrying case (supplied) not only offers protection during transit but also includes extra storage space for accessories and other tools.

Small Size…

This portable appliance testers is also extremely compact, and has Fluke's traditional ruggedness to be able to withstand working in the field. Packed with all the features you need for testing portable appliances, a Fluke PAT tester is a complete all-in-one solution.

Specifications: Fluke 6500-2 Portable Appliance Tester

Specifications		
Test specifications	The accuracy specification for the display range is defined as ±(%reading + digit counts) at 23 °C ±5 °C, ≤75% RH.	
	Between 0 °C and 18 °C and between 28 °C and 40 °C, accuracy specifications may degrade by 0.1 x (accuracy specification) per °C.	
	The measurement range meets the service operating errors specified in EN61557-1: 1997, EN61557-2: 1997, EN61557-4: 1997, EN61557-6: 1997, DIN VDE0404-2.	
Power-on test	The test indicates reversed L-N, missing PE, and measures the mains voltage and frequency.	
	Display range	90 V to 264 V
	Accuracy at 50 Hz	±(2% + 3 counts)
	Resolution	0.1 V
	Input impedance	> 1 MΩ // 2.2 nF
	Maximum input mains voltage	264 V
Earth bond test (Rpe)	Display Range	0 to 19.99 Ω
	Accuracy (after bond test zeroing)	±(5% + 4 counts)
	Resolution	0.01 Ω
	Test current	200 mA AC -0% +40% into 1.99 Ω 10 A AC ±20% into 25 mΩ at 230 V
	Open circuit voltage	> 4 V AC, < 24 V AC
	Bond test zeroing	can subtract up to 1.99 Ω

Insulation test (Riso)	Display range	0 to 299 MΩ
	Accuracy	±(5% + 2 counts) from 0.1 to 300 MΩ
	Resolution	0.01 MΩ (0 to 19.99 MΩ) 0.1 MΩ (20 to 199.9 MΩ) 1 MΩ (200 to 299 MΩ)
	Test voltage	500 V DC -0% + 25% at 500 kΩ load or 250 V dc -0% +25% at 250 kΩ load
	Test current	> 1 mA at 500 kΩ load, < 15 mA at 0 Ω
	Auto discharge time	< 0.5 s for 1 µF
	Max. capacitive load	Operational up to 1 µF
Touch current test	Display range	0 to 1.99 mA AC
	Accuracy	±(4% + 2 counts)
	Resolution	0.01 mA
	Internal resistance (via probe)	2 kΩ
	Measuring method	Probe*
Substitute leakage current test	Display range	0 to 19.99 mA AC
	Accuracy	±(2.5% + 3 counts)
	Resolution	0.01 mA
	Test Voltage	100 V AC ±20%
Load/leakage test: load current	Display range	0 A to 13 A
	Accuracy	±(4% + 2 counts)
	Resolution	0.1 A*
Load/leakage test: load power	Display range 230 V Mains	0.0 VA to 3.2 kVA
	Accuracy	±(5% + 3 counts)
	Resolution	1 VA (0 to 999 VA), 0.1 kVA (>1.0 kVA)*
Load/leakage test: leakage current	Display range	0 to 19.99 mA
	Accuracy	±(4% + 4 counts)
	Resolution	0.01 mA*
PELV test	Accuracy at 50 Hz	±(2% + 3 counts)
	Overload protection	300 V rms
	Warning threshold	25 V rms
RCD test: trip current	Operational error	±10%
	Nominal	30 mA
	Accuracy	±5%

RCD test: trip time	Standard requirement	61557 Part 6; tolerance of rated test current 0% to +10%
	Operational error	±10%
	RCD type	AC general-purpose 30 mA
	Display range	310 ms
	Resolution	0.1 ms
	Accuracy	3 ms
	Trip time limit at 100% (30 mA)	300 ms
	Trip time limit at 500% (150 mA)	40 ms
*The appliance under test is energized at mains potential.		

Environmental specifications	
Operating temperature	0 to 40 °C
Relative humidity	Non condensing <10 °C
	95% from 10 to 30 °C
	75% from 30 to 40 °C

Safety specifications	
Safety rating	Complies with EN61010-1 3rd edition
	CAT II, 300 V, pol 2

Mechanical and general specifications		
Size (L x W x H)	200 x 275 x 114 mm	
Weight	3.13 kg	
Power supply	230 V +10% -15%, 50 Hz ±2 Hz or (6500-2 only: 110V +10% -15%,50 Hz ±2 Hz)	
Power consumption (tester)	13 W typical (idle) 60 W max. during 25A Bond test	
Storage	Temperature	-10 to 60 °C
	Corrosion	70 °C @ 95% RH for 5 days max.
Operating altitude	0 up to 2000 m	
Sealing	IP-40 (enclosure), IP-20 (connectors)	
EMC	Complies with EN61326-1, portable	
EMI Immunity	3 V/m	

Ordering information

Fluke 6500-2

Fluke 6500-2 Portable Appliance Tester

- Fluke 6500-2 Portable Appliance Tester
- Quick reference guide
- Hard carrying case
- Test lead
- Test probe
- Crocodile clip
- Mains cord
- USB stick
- USB cable

Fluke. *Keeping your world up and running.®*

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