

## TECHNICAL DATA

# Fluke 6500-2 Portable Appliance Tester with TruTest Data Management Software Kit



## Key features

- 6500-2 Portable Appliance Tester
- TruTest Data Management Software"

## Product overview: Fluke 6500-2 Portable Appliance Tester with TruTest Data Management Software Kit

### [Fluke 6500-2 Portable Appliance Tester](#)

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.

- Dedicated key for each test for 'one-touch' testing
- Complies with the new standards EN 50678 and 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

### [Fluke TruTest Data Management Software](#)

Fluke TruTest Software is designed to eliminate the hassle associated with traditional electrical system data management and reporting. Whether you are testing fixed wire installations, or appliances in an office, verifying repairs in a workshop, or performing annual inspections proper data management is critical for producing easy-to-understand reports for clients. Compatible with a growing list of Fluke and Beha-Amprobe test and measurement devices TruTest Software allows you to quickly and easily import measurement results directly from your test instruments, manage files transferred from instruments, or manually enter data as needed.

## Specifications: Fluke 6500-2 Portable Appliance Tester with TruTest Data Management Software Kit

Specifications		
Test specifications	The accuracy specification for the display range is defined as $\pm(\% \text{reading} + \text{digit counts})$ at 23 °C $\pm 5$ °C, $\leq 75\%$ RH.	
	Between 0 °C and 18 °C and between 28 °C and 40 °C, accuracy specifications may degrade by $0.1 \times (\text{accuracy specification})$ 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	$\pm(2\% + 3 \text{ counts})$
	Resolution	0.1 V
	Input impedance	$> 1 \text{ M}\Omega // 2.2 \text{ nF}$
	Maximum input mains voltage	264 V

Earth bond test (Rpe)	Display Range	0 to 19.99 $\Omega$
	Accuracy (after bond test zeroing)	$\pm(5\% + 4 \text{ counts})$
	Resolution	0.01 $\Omega$
	Test current	200 mA AC -0% +40% into 1.99 $\Omega$ 10 A AC $\pm 20\%$ into 25 m $\Omega$ at 230 V
	Open circuit voltage	> 4 V AC, < 24 V AC
	Bond test zeroing	can subtract up to 1.99 $\Omega$
Insulation test (Riso)	Display range	0 to 299 M $\Omega$
	Accuracy	$\pm(5\% + 2 \text{ counts})$ from 0.1 to 300 M $\Omega$
	Resolution	0.01 M $\Omega$ (0 to 19.99 M $\Omega$ ) 0.1 M $\Omega$ (20 to 199.9 M $\Omega$ ) 1 M $\Omega$ (200 to 299 M $\Omega$ )
	Test voltage	500 V DC -0% + 25% at 500 k $\Omega$ load or 250 V dc -0% +25% at 250 k $\Omega$ load
	Test current	> 1 mA at 500 k $\Omega$ load, < 15 mA at 0 $\Omega$
	Auto discharge time	< 0.5 s for 1 $\mu$ F
	Max. capacitive load	Operational up to 1 $\mu$ F
Touch current test	Display range	0 to 1.99 mA AC
	Accuracy	$\pm(4\% + 2 \text{ counts})$
	Resolution	0.01 mA
	Internal resistance (via probe)	2 k $\Omega$
	Measuring method	Probe*
Substitute leakage current test	Display range	0 to 19.99 mA AC
	Accuracy	$\pm(2.5\% + 3 \text{ counts})$
	Resolution	0.01 mA
	Test Voltage	100 V AC $\pm 20\%$
Load/leakage test: load current	Display range	0 A to 13 A
	Accuracy	$\pm(4\% + 2 \text{ counts})$
	Resolution	0.1 A*
Load/leakage test: load power	Display range 230 V Mains	0.0 VA to 3.2 kVA
	Accuracy	$\pm(5\% + 3 \text{ counts})$
	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	$\pm(4\% + 4 \text{ counts})$
	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	

Function	Demo	Lite	Advanced
Database structure (Local standalone or server based)	Local	Local	Local
Portable Appliance Tester (PAT) module	•	•	•
Portable Appliance Testers supported	Fluke 6500, Fluke 6500-2, Beha-Amprobe GT-600, Beha-Amprobe GT-650, Beha-Amprobe GT-800, Beha-Amprobe GT-900		
Maximum addable clients	1	2	Unlimited
Maximum addable sites/client	2	5	Unlimited
Maximum addable locations/client	5	50	Unlimited
Maximum addable appliances/client	20	1000	Unlimited
Installation Testers (INST) module	•	•	•
Installation Testers supported	Fluke 1653, Fluke 1653B, Fluke 1654B, Fluke 1662, Fluke 1663, Fluke 1664 FC, Beha-Amprobe ProInstall-100, Beha-Amprobe ProInstall-200		
Maximum addable clients	1	2	Unlimited
Maximum addable sites/client	2	5	Unlimited
Maximum addable locations/client	5	25	Unlimited
Maximum addable appliances/client	50	200	Unlimited
Include demo database	•	•	•
Create clients	•	•	•
Rename clients		•	•
Delete clients	•	•	•
Create nodes	•	•	•
Move nodes	•	•	•
Rename nodes		•	•
Delete nodes	•	•	•
Edit client information		•	•
Edit site information		•	•
Edit location information		•	•
Edit appliance information		•	•
Edit test information		•	•

Add test step		•	•
Delete test step		•	•
Edit test step		•	•
Add remarks		•	•
Add attachment (file) to remark			•
Edit remark		•	•
Delete remark		•	•
Read data from instrument	•	•	•
Read data from file	•	•	•
Read data conflict management	•	•	•
Read data assign tree structure	•	•	•
Load data to instrument			*Compatible tool required
Use search	•	•	•
Show reports	With watermark	•	•
Show certificates	With watermark	•	•
Save (PDF, XML,...) /Print reports		•	•
Save (PDF, XML,...)/Print certificates		•	•
Add engineers	Demo engineer	•	•
Edit engineers		•	•
Delete engineers		•	•
Print engineers		•	•
Add test instruments	Demo instrument	•	•
Edit test instruments		•	•
Delete test instruments		•	•
Print test instruments		•	•
Edit my company info	Demo company	•	•
Edit company logo	Demo logo		•
Edit certification logo	Demo logo		•

View Auto Test Codes	•	•	•
Select favorites Auto Test Codes		•	•
Print favorites Auto Test Codes		•	•
Print All Auto Test Codes		•	•
Create customized Auto Test Codes			•
Edit customized Auto Test Codes			•
Copy customized Auto Test Codes			•
Delete customized Auto Test Codes			•
Print Customized Auto Test Codes			•
Create backup		•	•
Restore backup		•	•
Maximum users	1 Demo user	2	Unlimited
Add users		•	•
Edit users		•	•
User roles		•	•
Edit user roles		•	•
Print users list		•	•
Edit limits		•	•
Available languages	EN, DE, FR, IT, NL		
Supported Installation certificates	DIN VDE 0701-0702, ÖVE/ÖNORM E 8701, SNR 462638, NEN3140, International template		
Change language	•	•	•
Change country	•	•	•
Change report language			•
Expire duration	60 days (calculated from installation date)	Unlimited	
Free updates		5 years (calculated from enter serial code date)	
Expiration popup notice	Daily	Every 30 days after 5 year free update period	
Activation date with days left until expiration	•	•	•

## System requirements

Type	Requirement
Operating System	<ul style="list-style-type: none"> <li>• Microsoft Windows 10, 64-bit and 32-bit (recommended)</li> <li>• Microsoft Windows 8/8.1, 64-bit and 32-bit</li> <li>• Microsoft Windows 7 with Service Pack 1, 64-bit and 32-bit</li> </ul>
System Memory	Minimum 4 GB RAM (64-bit) or 2 GB RAM (32-bit)
Hard disk space	Minimum 2 GB available hard disk space
Display resolution	Minimum screen resolution 1366 x 768
Communication interfaces	USB



## Ordering information



### Fluke 6500-2 NL KIT

Fluke 6500-2 Portable Appliance Tester with TruTest Data Management Software Kit

Includes:

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

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

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