

# HPAT Series

Portable handheld PAT Testers

Technical Data



## Key features

- Compact, portable design
- High-quality colour display with optional help screens
- Clear and simple PASS / FAIL indication with measured values
- Automatic testing Class I, Class II & IEC power lead tests
- IT safe 200mA earth bond test
- Selectable 250V or 500V insulation test
- USB-C rechargeable, fast charge support and power save mode

## Premium features HPAT650

- Memory storage with on screen recall
- Adjustable test limits for long mains leads
- Single and sequenced test execution mode
- Substitute leakage test at reduced voltage for checking earth leakage

	HPAT550	HPAT650
Class I / Class II test	✓	✓
Pass / Fail Indication	✓	✓
Test values displayed	✓	✓
200mA Earth continuity test current	✓	✓
Insulation Test Voltage 250V & 500V	✓	✓
Lead Test	✓	✓
Rechargeable (via USB-C)	✓	✓
Sequenced test mode	✓	✓
Single test execution mode		✓
Memory (100 results)		✓
Selectable limits		✓
Substitute leakage test		✓

The HPAT Series of handheld PAT testers can be used for testing all types of portable appliances. They are designed for ease of use with one-button automatic testing while the small, lightweight design gives ultimate portability. Both models feature a bright, high-quality colour display for ease of use and can be charged via the integral USB-C charging port. The 250V insulation test option is ideal for surge-protected devices.

The HPAT650 incorporates result storage with on screen recall, substitute leakage test, single test execution mode and features adjustable test limits to allow for long leads.

A comprehensive range of optional adaptors is available for testing 110V appliances and equipment fitted with 3-phase plugs.

FUNCTION	HPAT550	HPAT650
<b>EARTH CONTINUITY</b>		
Test voltage	>4V DC (into open circuit)	
Test current	>200mA DC (into short circuit)	
Range	0.01 - 20Ω	
Resolution	0.01Ω	
Accuracy	± (5% of reading + 2 digits)	
Fixed / default pass limits	Fixed ≤0.1Ω ≤0.5Ω selectable pass for long cable	Default ≤0.1, user settable ≤0.5Ω selectable pass for long cable
User settable limits	-	≤0.1Ω to ≤0.9Ω in 0.1Ω steps
<b>INSULATION</b>		
Test voltage	User selectable >250V DC at 1mA / >500V DC at 1mA (<312.5V DC open circuit / <625V DC open circuit)	
User selectable voltage		
Test current	<2mA (into short circuit)	
Range	0.01MΩ - 100MΩ	
Resolution	0.01MΩ (10kΩ - 2MΩ), 0.1MΩ (2MΩ - 20MΩ), 1MΩ (20MΩ - 100MΩ)	
Accuracy	5% reading + 2 digits	
Pass level	Lead: ≥ 1.0MΩ, Class I: ≥1.0MΩ, Class II: ≥2.0MΩ	
User settable pass level	-	≥0.3MΩ to ≥ 1MΩ in 0.1MΩ steps ≥1MΩ to ≥ 10MΩ in 1MΩ steps
<b>SUBSTITUTE LEAKAGE TEST</b>		
Test voltage	-	<50V AC (into open circuit) 0.02-20mA DC (into short circuit)
Accuracy	-	± (5% reading + 2 digits)
Pass level	-	<5mA
<b>MEMORY</b>		
Test records	-	100 tests stored for on-screen recall
<b>POWER</b>		
Batteries	3.7V 5000mAh lithium polymer battery (non-user replaceable)	
Battery life	Fully charged, minimum 1700 complete tests approx.	
Auto power down	Auto dimming after 3 minutes, Auto power down after 5 minutes of inactivity	
<b>ENVIRONMENTAL</b>		
Location	Suitable for indoor use, and outdoor use in dry weather conditions only	
Altitude	Up to 2000m	
Operating temperature	0°C to 40°C	
Humidity	≤80% RH up to 31°C, decreasing linearly to 50% RH at 40°C	
Ingress protection class	IP20	
Pollution degree	2	
<b>GENERAL</b>		
Overload protection	300V AC/DC	
Protection class	IP20	
Safety	Complies to BS EN 61010-1	

## Comprehensive portable appliance testing kits

Martindale offers a range of professional PAT kits designed for both new or experienced users. These comprehensive kits provide all the additional items needed for PAT testing including pass / fail labels and adaptors. For full details go to the Martindale website: [www.martindale-electric.co.uk](http://www.martindale-electric.co.uk)

### Includes

**HPAT550:** TL67 earth bond probe, EX322 IEC adaptor lead, TC57 carry case, USB-A to USB-C cable, TL178 null pin on keyring, instruction manual and verification certificate.

**HPAT650:** TL67 earth bond probe, EX322 adaptor lead, TL178 null pin on keyring, TC57 carry case, USB-A to USB-C cable, instruction manual and verification certificate

### Optional accessories

TL157 110V PAT Adaptor, EX331 Extension Lead Adaptor, PATREG Register Book, PL13 Plug Lock Out, PAT testing labels LAB1, LAB2 and FAIL1. TL151, TL152, TL153 and TL154 3-Phase Adapters.

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