

# MI 2142 AlphaPAT



**- PC SW PATLink PRO A 1305 included**

- ✓ Simple
- ✓ Easy to use
- ✓ Fast & accurate
- ✓ Complete safety testing

(200mA, 10A,  
25A Earth Bond Test)



MI 2142 AlphaPAT is mainly powered multifunctional instrument intended to perform measurements for testing the electrical safety of portable electrical equipment. The handling and use of the instrument is clear and simple due to large graphical LCD screen with backlight. Instrument has built-in HELP screens for each measurement. The MI 2142 can store up to 1100 test results with parameters that can be downloaded onto a PC for further data handling and creation of test report (software included in standard set). The lightweight design, pre-programmed and custom test sequences and optional bar-coding system make the MI 2142 an ideal instrument for high volume professional safety testing of portable appliances. The MI 2142's extended communication facility supports the use of an RS232 receipt printer and RS232 barcode scanner. In addition, the MI 2142 also supports the use of an RFID scanner for reading / writing RFID tags.

#### KEY FEATURES:

- Graphic LCD with resolution of 128 x 64 dots, with backlight.
- The graphic display offers easy reading of results, indications, measurement parameters and messages.
- Large data flash memory for storing test results & parameters (about 1100 tests with parameters can be stored in average).
- Two RS232C communication ports for communication with PC, and barcode reader.
- Built-in real time clock.
- Bar-coding system for quick test code selection and identification of device under test.
- Programmable limits for PASS / FAIL evaluation.
- Fully compatible with new Metrel PATLink PRO PC software package, included in standard set (download, view, print and export of test results).
- Optional PC SW PATLink PRO Plus (advanced test result analysis and professional test report creation)
- Portable and lightweight design.

#### THE FOLLOWING TESTS CAN BE PERFORMED:

- Functional and visual inspection;
- Earth bond resistance;
- Insulation resistance;
- Substitute leakage current;
- Differential leakage current test;
- Touch leakage test;
- IEC cord polarity test;
- Power test;
- Clamp current test.

#### POWERFUL FUNCTIONS FOR FAST AND EFFICIENT PERIODIC TESTING:

- Pre-programmed test sequences;
- Fast testing with the help of barcodes;
- Test sequences can be created manually on instrument.

#### APPLICATION:

- Professional portable appliance testing;
- General portable appliance testing;
- Multi-location portable appliance testing.

#### APPLICATION:

##### Electromagnetic compatibility (EMC)

- EN 61326

##### Safety (LVD)

- EN 61010-1

##### Functionality

- VDE 0701-0702;
- BS89



# Technical specifications

## Earth bond resistance (200mA, 10A, 25A)

Range	Resolution	Accuracy
0.00 Ω ...19.99 Ω	0.01 Ω	±(5 % of reading + 3 digits)

## Insulation resistance (250 VDC, 500 VDC)

Range	Resolution	Accuracy
0.000 MΩ ...0.500 MΩ	0.001 MΩ	±(10 % of reading + 5 digits)
0.501 MΩ ...1.999 MΩ	0.001 MΩ	±(5 % of reading + 3 digits)
2.00 MΩ ...19.99 MΩ	0.01 MΩ	±(5 % of reading + 3 digits)

## Substitute leakage current (50 VAC)

Range	Resolution	Accuracy
0.00 mA ...19.99 mA	0.01 mA	±(5 % of reading + 5 digits)

## Differential leakage current (230 VAC)

Range	Resolution	Accuracy
0.00 mA ...19.99 mA	0.01 mA	±(5 % of reading + 5 digits)

## Power measurement (230 VAC)

Range	Resolution	Accuracy
0.00 kVA ... 3.70 kVA	0.01 kVA	±(10 % of reading + 3 digits)

## Touch leakage current (230 VAC)

Range	Resolution	Accuracy
0.00 mA ...1.99 mA	0.01 mA	±(5 % of reading + 5 digits)

## Clamp current

Range	Resolution	Accuracy
0.00 mA ... 9.99 mA	0.01 mA	±(5 % of reading + 5 digits)
10.0 mA ... 99.9 mA	0.1 mA	±(5 % of reading + 5 digits)
100 mA ... 999 mA	1 mA	±(5 % of reading + 5 digits)
1.00 A ... 9.99 A	0.01 A	±(5 % of reading + 5 digits)
10.0 A ... 24.9 A	0.1 A	±(5 % of reading + 5 digits)

Polarity test (<50 V AC)

## General data

Power supply voltage:	230 VAC (±10 %, 50 or 60 Hz)
Maximum appliance current:	16A
Working temperature range:	0 °C ÷ 40 °C
Maximum relative humidity:	95 % RH (0 °C ÷ 40 °C), non-condensing
Display:	128 x 64 dots matrix display with backlight
Memory:	1100 memory locations
Communication port:	9-pin subminiature type D, female
Overvoltage category:	CAT II / 300 V
Pollution degree:	2
Dimensions (w x h x d):	26,5 cm x 11 cm x 18,5 cm
Weight:	3,5 kg



Measuring and Regulation Equipment Manufacturer

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## Ordering information

Standard set

MI 2142



- Instrument MI 2142 AlphaPAT
- Carrying bag
- Continuity / Leakage cable
- PC software PATLink PRO
- RS232 cable
- Instruction manual
- Calibration certificate

## Optional Accessories

Photo	Order No.	Description
	A 1103	Receipt Printer
	A 1226	RS232 / DB 25 Cable for printer A 1103
	A 1105	Barcode scanner
	A 1107	RFID reader / writer
	A 1108	RFID tags, self-stick, 25 pcs RFID tags, key-tag, 25 pcs
	A 1171	RS232 / USB adapter with 1m cable
	A 1203	Upgrade code PATLink PRO to PATLink PRO Plus
	A 1207	Three phase adapter
	A 1306	PC SW PATLink PRO Plus with USB and RS232-PS/2 cable
	A 1337	RFID tags, self-stick, 50 pcs
	A 1404	Earth Bond test lead with probe

Note! Photographs in this catalogue may slightly differ from the instruments at the time of delivery. Subject to technical change without notice.