

Multifunctional  
VDE 0701-0702 tester

# MI 3305 OmegaGT<sup>Plus</sup> (Flash test) MI 3304 BetaGT<sup>Plus</sup>



- 25A Earth bond
- Professional test report

## The Most Complete Portable Appliance Tester



**Metrel's top of the range measuring instrument for electrical safety testing of a wide range of (portable) electrical appliances, IT equipment, IEC cords and portable RCDs with corresponding IEC/EN and VDE standards.**

New PAT<sup>Plus</sup> instruments are suitable for periodic testing, troubleshooting or as a tool for electrical safety in workshops. Instruments are placed in robust, waterproof case.

Over 100 pre-programmed **auto test sequences** cover most of the test requirements. User can define up to 50 additional customized auto tests. **Barcode labels** and reader enable super fast auto-testing and appliance identification. **RFID** technology is supported as well **QWERTY keyboard** allows easy data entries. **Serial printer** can be connected to the instrument to print out selected test results. Immediate test result printout facility is enabled with special designed **mobile label printer** available as accessory. Labels can be printed and posted on tested appliance immediately after test is finished.

**Professional PC SW PATLink PRO** enables viewing and advanced analysing of measurement results (comparison/trends for selected appliance) including comparison, storing of results for documentation, printing of test reports.

### The following test are supported:

- Earth bond continuity test with currents up to 25 A
- Insulation resistance,
- Leakage current (differential, substitute and touch),
- Functional test,
- Dielectric withstanding test 1500 V and 3000 V AC (MI 3305 only),
- Polarity test of IEC cord,
- TRMS leakage and load current measurement using clamp current adapter and
- Trip-out time measurement of portable RCDs.

### Features:

- User-friendly graphic user interface (GUI),
- instrument personalization to user needs,
- barcode reader and serial printer support,
- RFID technology for fast identification and storage of test results,
- saving auto test results with important information,
- quickly searching of test results using special filters,
- downloading/uploading auto test results to/from PC,
- test results comparison/trends and label printing.

### Application:

Periodical testing  
Electrical service interventions  
Control testing

### Standards:

Measurements:  
IEC 60335-1, IEC 60598-1,  
IEC 60745, IEC 60950,  
VDE 701 T1, VDE 702 T2, BS 89

Safety and EMC:  
EN 61010-1, IEC 61326

### General data:

Rated supply voltage: 230 V AC ( $\pm 10\%$ , 50/60 Hz)  
Maximum appliance current: 16 A  
Overvoltage category: CAT II / 300 V  
Protection classification: I  
Pollution degree: 2  
Degree of protection: IP 50  
(closed and locked cover)  
Case: shock proof plastic / portable  
Display: 240x128 dots graphic matrix display with backlight  
Memory: 6800 memory locations  
Interfaces: RS232 and USB

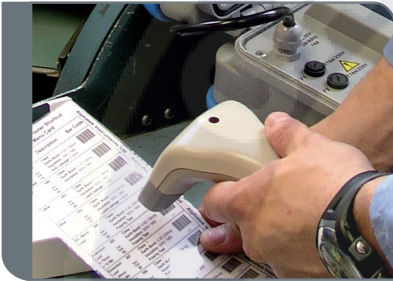
Dimensions (w x h x d):  
33.5 cm x 16.0 cm x 33.5 cm  
Weight (with standard accessories):  
8.4 kg



## Technical specification

<b>Earth bond resistance readout (4 A, 10 A, 25 A)</b>	<b>Range</b> 0.00 Ω ÷ 1.99 Ω 2.00 Ω ÷ 19.99 Ω	<b>Accuracy</b> ±(5 % of reading + 3 digits) ±10 %
<b>Earth bond resistance readout (200 mA)</b>	0.00 Ω ÷ 19.9 Ω	±10 %
<b>Insulation resistance readout</b>	0.000 MΩ ÷ 0.500 MΩ 0.501 MΩ ÷ 199.9 MΩ	±(10 % of reading + 5 digits) ±(5 % of reading + 3 digits)
<b>Substitute leakage current readout</b>	0.00 mA ÷ 19.99 mA	±(5 % of reading + 5 digits)
<b>Touch leakage current readout</b>	0.00 mA ÷ 1.99 mA	±(10 % of reading + 5 digits)
<b>Differential leakage current readout</b>	0.00 mA ÷ 9.99 mA	±(5 % of reading + 5 digits)
<b>Apparent power readout</b>	0.00 kVA ÷ 4.00 kVA	±(5 % of reading + 3 digits)
<b>Clamp current</b>	0.00 mA ÷ 24.9 A	±(5 % of reading + 5 digits)
<b>Flash current readout (OmegaPAT only)</b>	0.00 ÷ 2.50 mA	±(5 % of reading + 5 digit)
<b>Portable RCD trip-out time readout</b>	0 ms ÷ 1999 ms (½xIΔN) ±3 ms	
Test currents (IΔN) 10 mA, 15 mA, 30 mA	0 ms ÷ 300 ms (IΔN) ±3 ms	
Test current multipliers ½, 1, 2 and 5xIΔN	0 ms ÷ 150 ms (2xIΔN) ±3 ms	
Test modes: single, autotest	0 ms ÷ 40 ms (5xIΔN) ±3 ms	
<b>Trip out times:</b>	½xIΔN      1xIΔN      5xIΔN	
according to EN 61008/EN 61009	tΔ > 300 ms    tΔ < 300 ms    tΔ < 40 ms	
according to BS 7671 (UK, Aus/NZ models)	tΔ > 1999 ms    tΔ < 300 ms    tΔ < 40 ms	
<b>Polarity test</b>	Test voltage < 50 V AC	

## Key Features



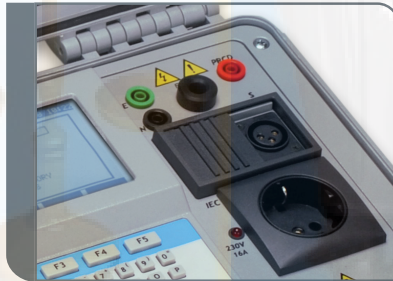
Bar code support for test data and tested appliance name entering.



Immediate printing of labels after test is completed.



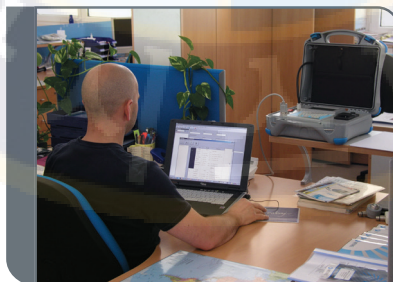
Large LCD with backlight and QWERTY keyboard.



Connector panel - test ports for fixed installed appliances.



Multiple input/output ports.



Professional PC SW PATLink PRO for upload and download of results.

## Ordering information

### Standard set

MI 3304, MI 3305



Instrument OmegaGTPlus MI 3305 or BetaGTPlus MI 3304  
Continuity / Leakage cable  
PRCD cable  
Test probe, green  
Test probe, black  
Test lead, green 1.5 m  
Test lead, black 1.5 m  
Crocodile clip, green  
Crocodile clip, black  
Flash cable (only for MI 3305)  
PC SW PATLink PRO  
RS232 cable  
USB cable  
Instruction manual  
Calibration certificate

### Optional Accessories

Photo	Order No.	Description
	A 1106	Barcode labels, 1000 pcs
	A 1105	Barcode scanner
	A 1276	Label printer with power and data cables
	A 1295	Spare label roll for A 1276
	A 1203	Upgrade code PATLink PRO to PATLink PRO Plus
	A 1283	Shielded leakage current clamp
	A 1107	RFID reader / writer
	A 1108	RFID tags, 50 pcs
	A 1207	Three phase adapter



Measuring and Regulation Equipment Manufacturer

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