

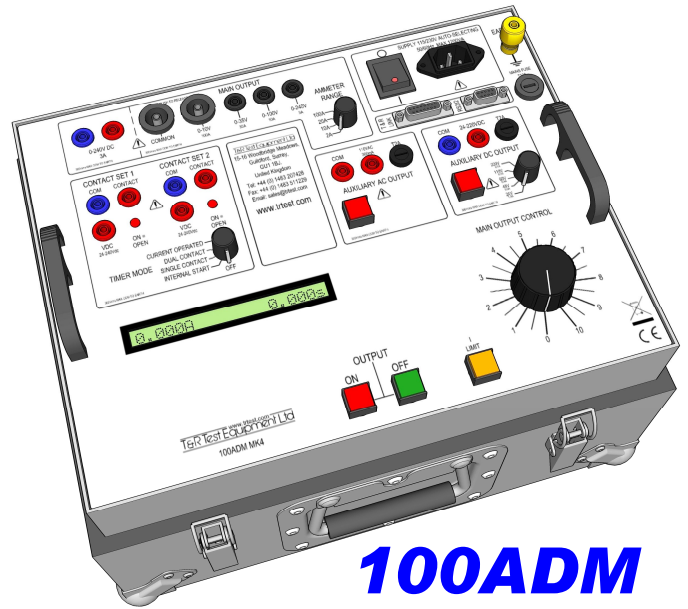
The NEW 100ADM mk4 Compared to the 100ADM mk1-3



**100ADM
mk1**



**100ADM
mk2/3**



**100ADM
mk4**

The 100ADM mk4 is the new replacement for the 100ADM mk3. The 100ADM mk4 retains everything that was good about previous versions, but updates the design to include current limit mode for fine control into digital relays and single cycle current capture for instantaneous trips. The unit also adds a powerful switchmode auxiliary power supply and automatic mains voltage selection. The unit is tougher, lighter, more accurate, and better protected than the original 100ADM. See overleaf for full specifications of the 100ADM mk4. For advanced features including data storage and phase-shifting voltage see the 200ADM-P.

Feature	100ADM	100ADM mk2	100ADM mk3	100ADM mk4
Maximum output current	100A for 1 minute	100A for 1 minute	100A for 1 minute	100A for 1 minute
Auxiliary ac output	110Vac 300mA	110Vac 300mA	110Vac 300mA	110Vac 300mA
Current limit mode for fine current control	x	x	x	✓
Stabilised dc supply	24, 48,60, 110, 220Vdc 25W	24, 48,60, 110, 220Vdc 25W	24, 48,60V 1A 110, 220Vdc 0.23A	24, 48,60V 1A 110, 220Vdc 0.23A
Current metering accuracy	0.6% rdg±6d	0.5% ±5d	0.5% ±5d	0.5% ±5d
Memory ammeter	x	200ms capture time	200ms capture	20ms single cycle capture
Display	LED	LCD	LCD	LCD
Duty cycle protection	x	✓	✓	✓
Thermal protection	x	✓	✓	✓
Case	Plastic	Aluminium	Aluminium	Aluminium
Supply voltage	115/220/240V man select	115/230V auto-selecting	115/230V auto-selecting	115/230V auto-selecting
Automatic supply selection	x	✓	✓	✓
RS232 printer/PC interface	x	✓	✓	✓
T&R link phase lock output to DVS3	x	✓	✓	✓
Weight	20.7kg	20.0kg	20.0kg	19.5kg
Dimensions	340x230x330mm	380x314x221mm	380x314x221mm	380x314x221mm
Shoulder strap	✓	✓	✓	✓
Carrying handle	✓	✓	✓	✓



T&R Test Equipment Ltd

100ADM mk4 Specification

Main Output

The main output on the unit has four taps, allowing the selection of output voltages up to 240V and output currents up to 100A.

Range	Current			Output @230V	
	Cont	5 min*	1 min*	O/C	Load V
10V	33A	67A	100A	10.5V	8.7V@100A
35V	10A	20A	30A	36V	32V@30A
100V	3A	6A	10A	108V	99V@10A
240V	1A	2A	3A	276V	259V@3A
240Vdc	1A	2A	3A		

*Off time of 15 minutes. On times based on an ambient temperature of 25°C.
 **6 second intermittent ratings available with 230V supply.

I Limit Mode

The main output has a current limit mode that gives very fine control of output currents up to 10A. It also allows fine current control into very low impedance loads such as digital relays.

Range	Current (A)				Output V @230V	
	Short circuit	Cont.	5 min	2 min	O/C	Load V
10V	10A	3A	6A	10A	8.6V	5V@5A
35V	3A	1A	2A	3A	29V	13V@2A
100V	1A	0.3A	0.6A	1A	88V	40V@0.6A
240V	0.3A	0.1A	0.2A	0.3A	224V	130V@0.2A

Auxiliary AC and DC Outputs

A switched, isolated auxiliary DC supply with current limit protection is available to power the relay under test, and a 110Vac auxiliary output is available for tests.

DC stabilised output	24V, 48V, 60V	1.0A
	110V, 220V	0.23A
Fixed AC output	110Vac	300mA

Metering

The output is metered by a digital true RMS system with a single cycle capture memory ammeter—whenever the timer stops and the output is switched off, the reading is held on the display. A current trip is set to 110% of full scale of the selected metering range.

Range	Resolution	Trip current	Accuracy	Acquisition time
2.000A	0.001A	2.1A	±0.5%rdg±5d	20ms
10.00A	0.01A	10.5A	±0.5%rdg±5d	20ms
20.00A	0.01A	21A	±0.5%rdg±5d	20ms
100.0A	0.1A	105A	±0.5%rdg±5d	20ms

Supply Requirements

115/230V±10% auto-selecting 50/60Hz 1ph 1100VA max

Accessories

Operating manual, o/p lead set, mains lead and spare fuses.

Timing System

Range	0-999.999s/9999.99s/99999.9s autoranging	
Resolution	1/10/100ms	
Accuracy	0.01%rdg+2d (+4d current operated mode)	
Contact o/c	24V	Contact s/c 20mA
Vdc	24—240V	

Each contact circuit will auto-select for normally open or normally closed contacts. A DC voltage of 24—240Vdc may also be used to trigger either timer channel. Contact state is shown by an LED. The output automatically switches off at the end of the test to safeguard the relay under test.

Mode	Timer Start	Timer Stop
Internal start	Press 'ON'	C1 or C2 change
1 contact	C1 1st change	C1 1 2nd change
2 contacts	C1 change	C2 change
Current operated	Current > 10% of metering range	Current < 10% of metering range
Pulse	Press 'ON'	200ms

Pulse mode is used for setting the current level in devices sensitive to heating. Current is injected for 200ms.

RS232 and T&R Link

An RS232 port is provided to allow connection to a PC or a printer. ADMlog software is available as an optional extra to log results from the 100ADM mk4. The T&R Link output allows a T&R DVS3 mk2 voltage source to phase lock to the 100ADM mk4 current..

Protection and Safety

The unit is designed to comply with BSEN61010 and is CE marked. An earth terminal is provided for connection to a local earth for testing in sub-station environments.

Dimensions

380mm x 314mm x 221mm

Including handle and corner protectors

Weight

19.5kg

Temperature Range

Storage -20°C to 60°C

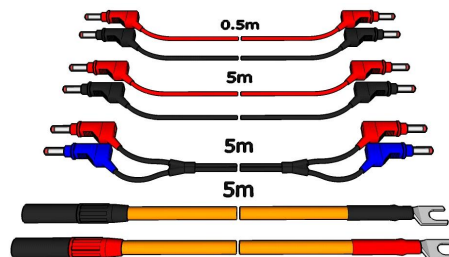
Operating 0°C to 45°C

Lead Set specifications

The 100ADM mk4 is supplied with a lead set consisting of:
 2 x 5m 25mm² 100A leads terminated in M10 ring crimps
 2 x 5m, 2 x 0.5m 2.5mm² 25A leads terminated in 4mm plugs
 1 x 5m 2 core 0.75mm² lead terminated in 4mm plugs.

Optional Accessories

Filter unit, RB10 resistor box, Printer, ADMlog software, pushbutton lead for runback timing on disc induction relays.



The unit is supplied with a comprehensive lead set in a sturdy carrying case.



Note: Due to the company's continuous research programme, the information above may change at any time without prior notification. Please check that you have the most recent data on the product.

T&R Test Equipment Ltd, 15-16 Woodbridge Meadows, Guildford, Surrey, GU1 1BJ, UK

Tel: +44 (0)1483 207428 Fax: +44 (0)1483 511229 email: sales@trtest.com

www.trtest.com