

ZERA

RMM3006

Product Catalogue

Doc.No: 100352720 Version from: 01.07.2022

Device



RMM3006 Three Phase Reference Multimeter (Desktop design)

Inclusive adjustment for one mains frequency.

RMM3006 is a highly precise reference standard with good long term stability and accuracy. Therefore the Reference Multimeter is often used as Reference Standard at national Metrological Institutes or regional Bureaus of Standards. At accredited test labs from utilities or private holders the Reference Multimeter is frequent used as transfer standard for the repetitive tasks of testing other portable and stationary meter test equipment.

Configuration:

- Direct current measurement up to 500 V / 160 A
- Accuracy for power/energy measurement: < ±0,02 %
- Comprehensive functionalities by supplied user software SMM3000 (for PC)
- Pulse input (BNC) for power proportional signals from reference meters (BNC cable optional)
- Scanning head input for pulses from static or electromechanical meters (scanning head optional)



RMM3006 Three Phase Reference Multimeter (19" Slip-in design)

Inclusive adjustment for one mains frequency.

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Ord.No. **100836401**

Ord.No.

100836601



Factory Calibration for New Instrument



Factory Calibration for NEW RMM300x, 50 Hz incl. ZERA calibration report.

Ord.No.

100007072

This article applies only for a purchase of new device.

Load points according to ZERA regulations.

Summary of used load points

can be downloaded at www.zera.de.

Additional load points are subject to charges.



Factory Calibration for NEW RMM300x, 60 Hz incl. ZERA calibration report.

Ord.No.

100007073

This article applies only for a purchase of new device.

Load points according to ZERA regulations.

Summary of used load points can be downloaded at www.zera.de.

Additional load points are subject to charges.



Factory Calibration for instrument, each additional load point for power and energy

Ord.No.

100007093



Factory Calibration for instrument, each additional load point for current and/or voltage

Ord.No.

100007094

DAkkS DKD-Calibration for Instrument



DAkkS DKD-Calibration for RMM300x, 50 Hz incl.DKD-Calibration Certificate acc. IEC 17025

Ord.No.

100006805

Load points according to ZERA regulations.

Summary of used load points can be downloaded at www.zera.de.

Additional load points are subject to charges.



DAkkS DKD-Calibration for RMM300x, 60 Hz incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No.

100006884

Load points according to ZERA regulations.

Summary of used load points can be downloaded at www.zera.de.

Additional load points are subject to charges.



DAkkS DKD-Calibration (acc. IEC 17025) for instrument, each additional load point for power and energy

Ord.No.

100006893



DAkkS DKD-Calibration (acc. IEC 17025) for instrument, each additional load point for current / voltage

Ord.No.

100006894

Power Cords



Power cord "Class I grounded plug type E/F to IEC 60320 C13", 2.5 m

For supply via power socket.

- 1x class I grounded plug type E/F (CEE 7/7), straight
- 1x socket IEC 60320 C13

Ord.No.

M00481006



Power cord "Class I grounded plug type E/F to IEC 60320 C13", 2.5 m

For supply via power socket.

- 1x class I grounded plug type E/F (CEE 7/7)
- 1x socket IEC 60320 C13, angled

Ord.No.

M00481004



Power cord "Plug type B to IEC 60320 C13", 2.5 m

For supply via power socket.

- 1x plug type B
- 1x socket IEC 60320 C13

Ord.No. **X00006459**



Power cord "Plug type I to IEC 60320 C13", 2.5 m

For supply via power socket.

- 1x plug type I (AS/NZS 3112, 3-pin)
- 1x socket IEC 60320 C13

Ord.No. **X00006460**



Power cord "Plug type G (BS 1363) to IEC 60320 C13", 2.5 m

For supply via power socket.

- 1x Plug type G (BS 1363)
- 1x socket IEC 60320 C13

Ord.No. **X00009832**



Power cord "Plug type D (BS 546) to IEC 60320 C13", 1.8 m

For supply via power socket.

- 1x Plug type D (BS 546)
- 1x socket IEC 60320 C13

Ord.No. **100929900**



Power cord "Plug type H" to IEC 60320 C13", 1.8 m

For supply via power socket.

- 1x Plug type H
- 1x socket IEC 60320 C13

Ord.No. 100929903

Current and Voltage Cables (see also Special Accessories)



Laboratory cable with stackable plug, red, 2.0 m Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **X00007597**



Laboratory cable with stackable plug, yellow, 2.0 m Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **X00006907**



Laboratory cable with stackable plug, blue, 2.0 m Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **X00007598**



Laboratory cable with stackable plug, black, 2.0 m Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 gmm

Ord.No. **X00006910**



Current cable up to 160 A, cable lug, closed // 2.0m

- 1x 8.5 mm cable lug,
- 1x 10.5 mm cable lug,
- Lead cross section: 50 qmm
- Phase colours: Please specify the colour code when ordering.

The cables will get a corresponding **coloured marking**. **21=black**, **22=red**, **23=blue**, **24= yellow**, **25=green**, **26=violet**, **27=brown**, **28=grey**, **29=white**

xx please select the colour



Current cable up to 120 A, on double-side socket, 2.0

m,

- 2x 6 mm socket
- Lead cross section: 35 qmm

 Phase colours: Please specify the colour code when ordering. The cables will get a corresponding coloured marking.

21=black, 22=red, 23=blue, 24= yellow, 25=green, 26=violet, 27=brown, 28=grey, 29=white

xx please select the colour

1011979xx

Ord.No.

Plug-in Adapter Pin 3 mm

For meter connection via terminal, realised as brass silver plated.
The two sides of the pin has different diameters and functions.

- 1 Side 6 mm pin for test leads
- 1 Side 3 mm-pin for meter terminals

The 6 mm pin is special designed for ZERA 6 mm socket system used with current test leads.

Ord.No. **Z10120115**

Plug-in Adapter Pin 4,2 mm

For meter connection via terminal, realised as brass silver plated. The two sides of the pin has different diameters and functions.

- 1 Side 6 mm pin for test leads
- 1 Side 4,2 mm-pin for meter terminals

The 6 mm pin is special designed for ZERA 6 mm socket system used with current test leads.

Ord.No. **Z10120112**

Plug-in Adapter Pin 5,5 mm

For meter connection via terminal, realised as brass silver plated.
The two sides of the pin has different diameters and functions.

- 1 Side 6 mm pin for test leads
- 1 Side 5,5 mm-pin for meter terminals

The 6 mm pin is special designed for ZERA 6 mm socket system used with current test leads.

Plug-in Adapter Pin 6 mm

The adapter is realized in brass silver plated. The two sides of the pin have the same dimensions (6 mm) and are special designed for ZERA 6 mm socket system used with current test leads and/or connection to modern ZERA meter test system (MTS).

Ord.No. **Z10120109**



Plug-in Adapter cable lug 8,5 mm closed

For current connection via screw terminals, realised as brass silver plated. The two sides of the pin has different connectors and functions.

- 1 Side 6 mm pin for test leads
- 1 Side 8,5 mm-cable lug closed in for screw terminals

The 6 mm pin is special designed for ZERA 6 mm socket system used with current test leads.

100640906

Ord.No.



Plug-in Adapter cable lug 10,5 mm closed

For current connection via screw terminals, realised as brass silver plated. The two sides of the pin has different connectors and functions.

- 1 Side 6 mm pin for test leads
- 1 Side 10,5 mm-cable lug closed in for screw terminals

The 6 mm pin is special designed for ZERA 6 mm socket system used with current test leads.

Ord.No. 100640907



Current cable up to 120 A, double-side socket, 1.0 m, for connection between source and reference meter.

- · 2x 6 mm socket
- · Lead cross section: 35 qmm
- Phase colours: Please specify the colour code when ordering. The cables will get a corresponding coloured marking.

21=black, 22=red, 23=blue, 24= yellow, 25=green, 26=violet, 27=brown, 28=grey, 29=white

xx please select the colour

Ord.No. 1012006xx

Software



Software SSM3000 / MTVis

The software runs under Windows 7 or 10.

• SSM3000: For external control via PC.

• MTVis: To readout and display saved data.

The software can be downloaded at www.zera.de.

Ord.No. 100090720

Impulse Sensor (see also Special Accessories)



TK118, scanning head

For detection of LED signals of electronic meters.

 Fixing: Via provided suction cup or via optionally available stretchable holding device for scanning heads TK326/TK118. Ord.No. 100201900



TK326-1, scanning head without holding device

For detection of rotor disc markings on Ferraris meters and LED signals on electronic meters.

• Fixing: Via stretchable holding device for scanning heads TK326/TK118.

Ord.No. **101064901**



Holding device for scanning head TK326/ TK118

Stretchable holding device to fix the scanning head TK326 or TK118 at the electricity meter.

• Maximum wingspan: 19.0 cm.

Ord.No. 100319600



K121, S0 pulse converter with measuring leads

For pulse detection of floating contacts as well as of S0 pulse output on electricity meters. Including two laboratory

cables with safety plug/connection pin.

Ord.No. **100004210**



Connection cable for scanning head input (SC) on ZERA instruments with RJ10 socket

Ord.No. **Z10353027**

100023739

Ord.No.

The spiral cable connects TKxxx and K121 to the instrument.

- 2x Modular connector RJ10
- Length: 1.00 m / expanded: 6.00 m

Connectors (see also Special Accessories)



Accessories bag with connection adapters

 01 Accessories bag
 100214400

 04 Spring clip
 100606750

 10 Adapter for terminal blocks
 101584400

 04 4-mm test clips
 X00009329

 (crocodile clips), slim

06 4-mm test clips X00010059

(crocodile clips), wide

10 Fuse, 1 A M00460244

5 mm x 20 mm, time-lag 05 Fuse, 20 A

6,3 mm x 32 mm, time-lag M00460185

Transport (see also Special Accessories)



Transport Case for RMM300x

Aluminum case with inlet from rigid foam, designed for

1 Instrument

Overall dimensions: 54 cm x 54 cm × 22 cm (H x W x D)

Ord.No. **X00010007**

Standard Accessories (see also Special Accessories)



Interface cable, RS232, crossed wired (null modem cable)

Connection cable

- 2x D-Sub socket, 9-pin
- Cable length: 3.00 m

Ord.No. **X00010844**



Coaxial cable with BNC plug, 3 m

with BNC plugs on both cable sides

Ord.No.

Z09548330

Documentation



Documentation RMM3006, German

01 Operation manual (german)

01 Interface description (german) 100322270

Ord.No. 100644480



Complete documentation as pdf files on USB Stick

Ord.No. 100090716

Special Accessories (Current and Voltage Cables)



Laboratory cable with stackable plug, green, 2.0 m Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **X00006908**



Laboratory cable with stackable plug, violet, 2.0 m Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **X00006909**



Laboratory cable with stackable plug, brown, 2.0 m Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **100414100**



Laboratory cable with stackable plug, grey, 2.0 m

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **100739800**



Laboratory cable with stackable plug, white, 2.0 m

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- · Lead cross section: 2.5 qmm

Ord.No. **100662500**

Special Accessories (Connectors)

Connecting terminals for current

 Isulating screw joint for flexible wire connection max cable size 1,5 ... 16 mm²

• Socket: 4 mm rigid socket in insulator accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00011923**



Adapter for terminal blocks

- Connection via insulated flexible copper conductor.
- Socket: 4 mm rigid socket in insulator, made of brass, accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00004961**



4 mm plug adapter (banana plug)

- Plug: 4 mm spring-loaded plug, made of brass.
- Socket: 4 mm rigid socket in insulator accepting springloaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00004962**



4 mm cable lug adapters

 Cable lug adapter, made of brass for permanent installation, e. g. for connecting screw terminals.

 Socket: 4 mm rigid socket in insulator accepting springloaded 4 mm plugs with rigid insulating sleeve. Ord.No. **X00004963**



Spring clip

- · Connection via spring clip.
- Socket: spring-loaded 4 mm plugs with rigid insulating sleeve

Ord.No. **100606750**



Test plugs for terminal blocks

- Plug: 4 mm test plug, made of brass with spring-loaded plug for connecting into rail mounted terminals with 4 mm sockets.
- Socket: 4 mm rigid socket in insulator accepting springloaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **100102400**



4 mm test clips (crocodile clips), wide

- Crocodile clip made of brass with all-round insulation. Toothed jaws for wide grip with surface for fine wire.
- Socket: 4 mm rigid socket in insulator accepting springloaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00010059**



4 mm test clips (crocodile clips), slim

- Small, slim crocodile clip made of brass with all-round insulation. Toothed jaws for wide grip with surface for fine wire.
- 4 mm rigid socket in insulator accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00009329**



Accessories bag without content DIN A6, material: polypropylene

Ord.No.

100214400

Fuse, 20 A, 6.3 mm x 32 mm, time-lag

Ord.No.

M00460185



Fuse 1 A 5 mm x 20 mm, time-lag type

Ord.No.

M00460244



Special Accessories (General)



Adapter "USB to RS232" (32/64 bit), 1.5 m For use with an external PC/Notebook (32/64 bit) with WINDOWS OS (7, 8, 10).

Ord.No.

101421801

Readjustment (only for Service)



Adjustment of RMM300x

Note: Calibration and Calibration report are not included.

Ord.No.

100033856

Factory Calibration (only for Service)



Factory Calibration for RMM300x, 50 Hz incl. ZERA calibration report.

Ord.No.

100007005

Load points according to ZERA regulations. Summary of used load points

can be downloaded at www.zera.de.

Additional load points are subject to charges.



Factory Calibration for RMM300x, 60 Hz incl. ZERA calibration report.

Ord.No.

100007076

Load points according to ZERA regulations.

Summary of used load points can be downloaded at www.zera.de.

Additional load points are subject to charges.



Factory Calibration for instrument, each additional load point for power and energy

Ord.No.

100007093



Factory Calibration for instrument, each additional load point for current and/or voltage

Ord.No.

100007094



ZERA GmbH Humboldtstrasse 2a D-53639 Koenigswinter Phone: +49 (0)2244 9277-0

E-Mail: zera@zera.de Internet: www.zera.de

Managing Director: Horst Wächter Headquarter: Königswinter

Commerzbank Bonn IBAN: DE29 3804 0007 0113 3131 00 SWIFT (BIC): COBADEFF380

Kreissparkasse Köln IBAN: DE15 3705 0299 0001 0784 92 SWIFT (BIC): COKSDE33

HRB 7073 Siegburg VAT-IdNo. DE 218 515 479 WEEE-Reg.Nr. DE 53879641

Notes on using the product catalogue

When ordering, always state the order number.

Pictures can differ from original product.

We follow ZVEI terms of delivery, see on www.zera.de