



ZERA

RMM3006
Product Catalogue

Doc.No: 100352720
Version from: 01.01.2024

Device



RMM3006 Three Phase Reference Multimeter (Desktop design)

Inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016724xx**

Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkKS 50 Hz	xx → 02
DAkKS 60 Hz	xx → 03

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: <math>< \pm 0,02 \%</math>
- 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)

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 qmm

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

Ord.No. **1012036xx**

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

Ord.No. **1011979xx**



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.

Ord.No. **Z10120108**



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.

Ord.No. **100640906**



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.

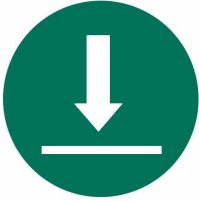
- 2x 6 mm socket
- Lead cross section: 35 qmm
- Phase colours: Please specify the colour code when ordering. The cables will get a corresponding coloured marking.

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

Ord.No. **1012006xx**

xx please select the colour

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.

Ord.No. **100090720**

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

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, 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 RJ10 socket input (SC)

The spiral cable for connecting of TKxxx or K121 to the ZERA instrument.

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

Ord.No. **Z10353027**

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
(crocodile clips), slim | X00009329 |
| 06 4-mm test clips
(crocodile clips), wide | X00010059 |
| 10 Fuse, 1 A
5 mm x 20 mm, time-lag | M00460244 |
| 05 Fuse, 20 A
6,3 mm x 32 mm, time-lag | M00460185 |

Ord.No. **100023739**

Transport (see also Special Accessories)



Transport Case for RMM300x

Aluminum case with inlet from rigid foam, designed for 1 Instrument without accessories
Overall dimensions:
54 cm x 54 cm x 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 for communication

- 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



Complete Documentation
as pdf files on USB flash drive

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

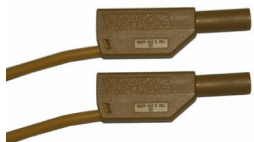
Ord.No. **X00006908**



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

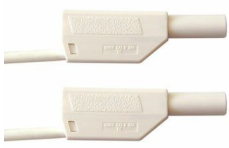
Ord.No. **100414100**



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. **100414103**



- 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 (Impulse Sensor)



- K121, S0 pulse converter without measuring leads**
For pulse detection of floating contacts as well as of S0 pulse output on electricity meters.

Ord.No. **Z09894100**

Special Accessories (Connectors)



- Connecting terminals for current**
- Insulating 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. **101584400**

- 4 mm plug adapter (banana plug)**
- Plug: 4 mm spring-loaded plug, made of brass.
 - Socket: 4 mm rigid socket in insulator accepting spring-loaded 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 spring-loaded 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 spring-loaded 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 spring-loaded 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 (for Service)

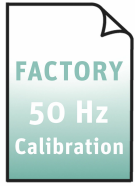


Adjustment of RMM300x

Note: Calibration and Calibration report
are not included.

Ord.No. **100033856**

Calibration (for Service)

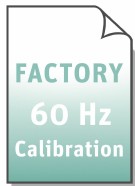


Factory Calibration for RMM300x, 50 Hz
incl. ZERA calibration report.

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**



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**

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