



ZERA

MT3000Reference_meter

Product Catalogue

Doc.No: 100352714
Version from: 01.01.2023

Device



MT3000[RM] Three Phase Reference Meter (12 A / Class 0,02)

Inclusive adjustment for one mains frequency.

Ord.No. **101198100**

MT3000[RM] is a modular designed Reference Meter and offers flexible option to add modules for enhanced functions or to increase the number of test specimen. Test voltage and test current for the Reference Meter will be measured at mains on-site or can be generated and measured via external source (optional). (e.g. *MT551*)

MT3000[RM] as standard configuration is designed for comprehensive testing of max. 1 test specimen.

Standard Configuration:

- Direct current measurement up to 300 V / 12 A
- Accuracy for power/energy measurement: < ± 0.02 %
- 1 x Meter Test Module 1 (MT3504)

Individual configuration with test modules possible.



MT3000[RM] Three Phase Reference Meter (12 A / Class 0,05)

Inclusive adjustment for one mains frequency.

Ord.No. **101198150**

MT3000[RM] is a modular designed Reference Meter and offers flexible option to add modules for enhanced functions or to increase the number of test specimen. Test voltage and test current for the Reference Meter will be measured at mains on-site or can be generated and measured via external source (optional). (e.g. *MT551*)

MT3000[RM] as standard configuration is designed for comprehensive testing of max. 1 test specimen.

Standard Configuration:

- Direct current measurement up to 300 V / 12 A
- Accuracy for power/energy measurement: < ± 0.05 %
- 1 x Meter Test Module 1 (MT3504)

Individual configuration with test modules possible.



**MT3000[RM] Three Phase Reference Meter
(120 A / Class 0,02)**

Inclusive adjustment for one mains frequency.

MT3000[RM] is a modular designed Reference Meter and offers flexible option to add modules for enhanced functions or to increase the number of test specimen. Test voltage and test current for the Reference Meter will be measured at mains on-site or can be generated and measured via external source (optional). (e.g. *MT551*)

MT3000[RM] as standard configuration is designed for comprehensive testing of max. 1 test specimen.

Standard Configuration:

- Direct current measurement up to 600 V / 120 A
- Accuracy for power/energy measurement: < ± 0.02 %
- 1 x Meter Test Module 1 (MT3504)

Individual configuration with test modules possible.

Ord.No. **101198101**



**MT3000[RM] Three Phase Reference Meter
(120 A / Class 0,05)**

Inclusive adjustment for one mains frequency.

MT3000[RM] is a modular designed Reference Meter and offers flexible option to add modules for enhanced functions or to increase the number of test specimen. Test voltage and test current for the Reference Meter will be measured at mains on-site or can be generated and measured via external source (optional). (e.g. *MT551*)

MT3000[RM] as standard configuration is designed for comprehensive testing of max. 1 test specimen.

Standard Configuration:

- Direct current measurement up to 600 V / 120 A
- Accuracy for power/energy measurement: < ± 0.05 %
- 1 x Meter Test Module 1 (MT3504)

Individual configuration with test modules possible.

Ord.No. **101198151**

Factory Calibration for New Instrument



Factory Calibration for NEW MT3000 12 A, 50 Hz
incl. ZERA calibration report.

Ord.No. **100007030**

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 MT3000 120 A, 50 Hz
incl. ZERA calibration report.

Ord.No. **100007047**

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 MT3000 12 A, 60 Hz
incl. ZERA calibration report.

Ord.No. **100519743**

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.



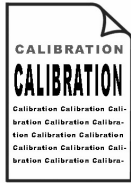
Factory Calibration for NEW MT3000 120 A, 60 Hz
incl. ZERA calibration report.

Ord.No. **100519744**

This article applies only for a purchase of new device.

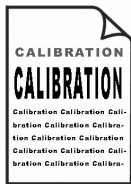
Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

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 MT3000 12 A, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100006828**

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 MT3000 120 A, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100006847**

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 MT3000 12 A, 60 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100519623**

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.

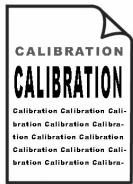


DAkKS DKD-Calibration for MT3000 120 A, 60 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100519650**

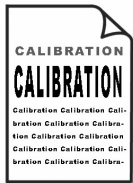
Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

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

Ord.No. **M00481006**

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



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

Ord.No. **X00006459**

- For supply via power socket.
- 1x plug type B
 - 1x socket IEC 60320 C13



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



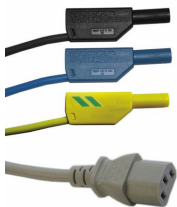
Power cord "Plug type H" to IEC 60320 C13", 1.8 m

For supply via power socket.

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

Ord.No.

100929903



Power cord with protective earth "stackable safety plug to IEC 60320 C13", 2.5 m

For supply via test voltage.

- 3x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve (1x black, 1x blue, 1x yellow/green)
- 1x socket IEC 60320 C13

Ord.No.

100067609

Current Clamps (see also Special Accessories)



MT3465, AC current clamp set

Electronically compensated, calibration independent from the instrument.

- Clamping diameter: 16 mm
- Output: D-Sub plug 25-pin
- Measuring range: 5 mA ... 120 A
- Error of measurement:
 - < $\pm 0.15\%$ @ 500 mA ... 120 A
 - < $\pm 0.3\%$ @ 100 mA ... < 500 mA
- Frequency range: 45 ... 65 Hz
- Measuring Category: CAT IV 300 V /CAT III 600 V

Ord.No.

101241500



MT3417, AC current clamp set 300 A

Useable only in combination with **MT3000**.

Electronically compensated, calibration independent from the instrument.

- Clamping diameter: 52 mm
- Output: D-Sub plug 25-pin
- Measuring range: 100 mA ... 300 A
- Error of measurement:
 - < $\pm 0,15\%$ / < $0,1^\circ$ (1 A ... 300 A)
 - < $\pm 0,3\%$ / < $0,1^\circ$ (500 mA ... 1 A)
 - < $\pm 0,6\%$ / < $0,15^\circ$ (200 mA ... 500 mA)
- Frequency range: 45 ... 65 Hz
- Rated voltage: 600 V, CAT III / 300 V, CAT IV

Ord.No.

100319201

Factory Calibration for NEW Current Clamps



Factory Calibration for NEW MT3460 / MT3465, 50 Hz

incl. ZERA calibration report.

Ord.No.

101242308

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 MT3416 / MT3417, 50 Hz
incl. ZERA calibration report.

Ord.No. **100519702**

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 MT3460 / MT3465, 60 Hz
incl. ZERA calibration report.

Ord.No. **101242309**

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.



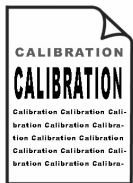
Factory Calibration for NEW MT3416 / MT3417, 60 Hz
incl. ZERA calibration report.

Ord.No. **100519705**

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 current clamps, each additional
load point for for power and energy**

Ord.No. **100007092**

DAkKS Calibration for Current Clamps



DAkKS DKD-Calibration for MT3460 / MT3465, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **101173912**

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.

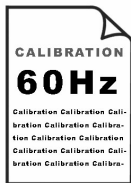


DAkKS DKD-Calibration for MT3416 / MT3417, 50 Hz
Incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100519600**

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 MT3460 / MT3465, 60 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **101173913**

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.

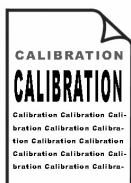


DAkKS DKD-Calibration for MT3416 / MT3417, 60 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100519603**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

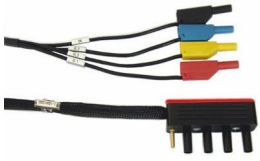
Additional load points are subject to charges.



DAkKS DKD-Calibration (acc. IEC 17025)
for current clamps, each additional
load point for power and energy

Ord.No. **100006892**

Quick Connection Cable (see also Special Accessories)

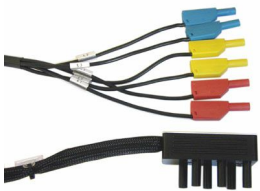


Quick connection cable "voltage/rigid sleeve" for MT series, 2.5 m, phase colours: red/yellow/blue/black

To prevent connecting faults on the instrument's side.
Measurement category III (CAT III).

- Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 4x stackable, spring-loaded 4 mm plug with rigid insulating sleeve - 1x red, 1x yellow, 1x blue, 1x black
- Cable cross-section: 2.5 qmm

Ord.No. **100023402**



Quick connection cable "current/rigid sleeve" for MT series, 12 A, 2.5 m, phase colours: red/yellow/blue

To prevent connecting faults on the instrument's side.

- Instrument's side: 1x 6-pin connector with anti-twist safeguard.
- Mains side: 6x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve. 2x red, 2x yellow, 2x blue.
- Cable cross-section: 2.5 qmm

Ord.No. **100023411**

Current and Voltage Cables (see also Special Accessories)

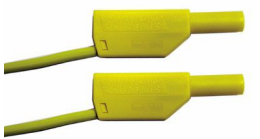


Laboratory cable with stackable plug, red, 2.0 m

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 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

Ord.No. **1011979xx**

xx please select the colour



- 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**



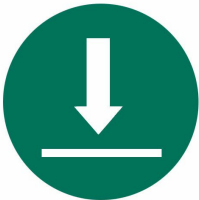
Current cable up to 120 A, boothside socket, 1.0 m, for connection between source and reference meter.

- 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. **1008472xx**

xx please select the colour

Software



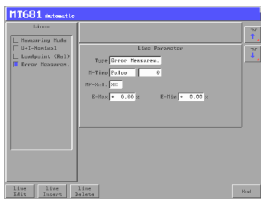
Software SSM3000 / MTVis

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.



Software option "Automatic Measurement" for MT365/MT3000

This software option requires a complete test system, consisting of reference meter and source. Creating and executing of test sequences which enables the system to test meters in a fully automatically mode. An external PC is not required. Test sequences and results will be stored on the USB stick.

Ord.No. **100078700**



MT3703 WinSAM software

The WinSAM control software serves for programming testing sequences and performing automatic tests. An external control computer is required for this feature. The software package contains an USB memory stick, USB dongle and a WinSAM license.

Ord.No. **100061700**

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

The spiral cable connects TKxxx and K121 to the instrument.

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

Ord.No. **Z10353027****ZZ8636 Start-stop pushbutton for signal entry**

The start-stop pushbutton is used for manual signal entry when testing electricity meters.

Ord.No. **101091620****Connectors (see also Special Accessories)****Accessories bag with connection adapters**

- | | |
|---|-----------|
| 01 Accessories bag | 100214400 |
| 03 Spring clip | 100606750 |
| 04 4-mm plug adapter (banana plug) | X00004962 |
| 10 Adapter for terminal blocks | X00004961 |
| 10 Connecting terminals for current | X00011923 |
| 03 4-mm test clips (crocodile clips), slim | X00009329 |
| 03 4-mm test clips (crocodile clips), wide | X00010059 |
| 10 Fuse, 3,15 A / 440 V
5 mm x 20 mm, time-lag | M00460252 |
| 10 Fuse, 15 A / 440 V
5 mm x 20 mm, time-lag | M00460259 |

Ord.No. **100023731**

Transport (see also Special Accessories)



Transport Case 1 with wheels for MT3000[RM]

Ultra High Impact Copolymer Polypropylene case with inlet from rigid foam, designed for

- 1 MT3000 Reference Meter [RM]
 - up to max. 1 test module with 120 A version
 - up to max. 2 test modules with 12 A version
- Accessories

Overall dimensions: 60 cm x 51 cm x 23 cm (H x W x D)

Please clarify whether the case size is suitable for the ordered number of test modules and accessories.

Ord.No. **100023900**



Transport Case 2 with wheels for MT3000[RM]

Ultra High Impact Copolymer Polypropylene case with inlet from rigid foam, designed for

- 1 MT3000 Reference Meter [RM]
 - up to max. 2 test modules with 120 A version
 - up to max. 3 test modules with 12 A version
- Accessories

Overall dimensions: 62,2 cm x 49,2 cm x 30,3 cm (H x W x D)

Please clarify whether the case size is suitable for the ordered number of test modules and accessories.

Ord.No. **100023905**



Transport Case 3 with wheels for MT3000[RM]

Ultra High Impact Copolymer Polypropylene case with inlet from rigid foam, designed for

- 1 MT3000 Reference Meter [RM] with 1 x MT3504
 - up to max. add. 3 test module with 120 A version
 - up to max. add. 4 test modules with 12 A version
- Accessories

Overall dimensions: 63 cm x 49,2 cm x 35,2 cm (H x W x D)

Please clarify whether the case size is suitable for the ordered number of test modules and accessories.

Ord.No. **100023906**

Standard Accessories (see also Special Accessories)



USB-Stick

To store customer data and measuring values. Provides easy data transfer from the instrument to the PC.

Ord.No. **101198310**

**Infrared data scanning head TK117; Cable 2m length**

For detection of infrared signals at electronic meters and for communication between meter and test system.

- Fixing: Via integrated magnet.

Ord.No. **X00009942****Interface cable, RS232, crossed wired (null modem cable)**

Connection cable

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

Ord.No. **X00010844****Display protection cover MT3204**

To protect the MT3000/MT551 display module against mechanical impact during transportation of the unit without carrying case.

Ord.No. **Z10342400**

Documentation

**Complete documentation as pdf files on USB Stick**Ord.No. **100090716**

Special Assessories (Modules)

**MT3504 - Meter module 1**

The MT3504 serves as communication module between the MT3000 and the meter under test. It provides the following connection possibilities:

- 1x Scanning head input for detection of the metrology pulses
- 1x S0-Inputs for pulse output testing
- 1x S0-Outputs for pulse input testing
- 1x IR-interface for meter reading acc. to IEC61107
- 1x 20mA CL-interface for meter reading acc. to IEC61107
- 1x BNC frequency input for testing of measuring units with a power proportional frequency output.

Ord.No. **100292701**



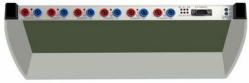
MT3502 Meter module 2

The MT3502 serves as expansion of the meter module 1 MT3504 and provide additionally the following possibilities:

- 4 S0-Inputs for pulse output testing
- 4 S0-Outputs for pulse input testing
- 1 RS232-interface for meter reading acc. to IEC61107
- 1 RS485-interface for meter reading acc. to IEC61107
- 1M-Bus interface for meter reading acc. to IEC61107

(The MT3502 is supported by using **WinSAM** control software **only**.)

Ord.No. **Z10300901**



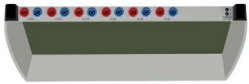
MT3503 - Meter module 3

The MT3503 serves as expansion of the meter module 2 MT3502 and provide additionally the following possibilities:

- 6x S0-Inputs for pulse output testing
- 6x S0-Outputs for pulse input testing

(The MT3503 is supported by using **WinSAM** control software **only**.)

Ord.No. **Z10301100**



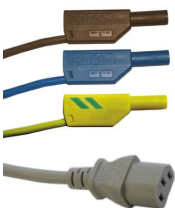
MT3303 Small signal measuring module

The MT3303 is an expansion of the MT3301/-02 and serves for direct measurement of voltages up to +/-10 V and currents up to +/-20 mA. The module is particular suitable for testing of transducers

- 6 freely programmable inputs for either voltage or current measurement.
- By connecting additional current clamps and voltage dividers it is also suitable for simultaneous three phase measurement of primary and secondary values on instrument transformers.
- All values and units for the measuring channels are freely selectable and allowing to connect a wide range of different transducers.
- Measuring accuracy <0.1%

Ord.No. **Z10300700**

Special Accessories



Power cord with protective earth "stackable safety plug to IEC 60320 C13", 2,5 m

For supply via test voltage.

- 3x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve (1x brown, 1x blue, 1x yellow/green)
- 1x socket IEC 60320 C13

Ord.No. **100067610**



Power cord with protective earth "stackable safety plug to IEC 60320 C13", 2,5 m

For supply via test voltage.

- 3x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve (1x red, 1x black, 1x yellow/green)
- 1x socket IEC 60320 C13

Ord.No. **100067611**

Special Accessories (Current Clamps and Probes)



MT3403, AC current clamp 1200 A

- Clamping diameter: 52 mm
- Output: 2x 4 mm safety sockets
- Measuring range: 10 mA ... 1200 A (1200 A for 40 min max. and a pause between measurement > 20 min)
- Error of measurement:
 - < $\pm 0.3\%$ / 0.7° (100 A ... 1200 A)
 - < $\pm 0.5\%$ / 1.0° (10 A ... 100 A)
 - < $\pm 1.0\%$ / 2.0° (1 A ... 10 A)
- Frequency range: 48 ... 65 Hz
- Rated voltage: 600 V, CAT III / 300 V, CAT IV

Note: Connection to MTxxx via input for direct current measurement.

Ord.No. **100032410**



MT3413, AC current clamp 1800 A

Clamping of round or square conductors.

- Clamping diameter: 64 mm or busbar from 50 x 135 mm up to 64 x 100 mm
- Output: 2x 4 mm safety sockets
- Measuring range: 1 A ... 1800 A (1800 A measurement for max. 10 min)
- Switchable ranges: 500 A, 1000 A, 1500 A
- Error of measurement in 1500 A range:
 - < $\pm 1.5\%$ / 1.5° (75 A)
 - < $\pm 0.75\%$ / 0.75° (300 A)
 - < $\pm 0.5\%$ / 0.5° (1500 A)
- Frequency range: 48 ... 65 Hz
- Rated voltage: 600 V, CAT III / 300 V, CAT IV

Note: Connection to MTxxx via input for direct current measurement.

Ord.No. **100032401**

**MT3470, flexible AC current probes 3000 A, 0.45 m**

Flexible clamping of any conductor to be measured (cable, bar, core, etc.) even on places difficult to access.

- Diameter: ca. 14 cm
- Output: 2x 4 mm safety plug connection via adapter **MT3423**
- Measuring range: 500 mA ... 3000 A
- Switchable ranges: 3 A, 30 A, 300 A, 3000 A
- Error of measurement with optimal range selection:
 - 3-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (0,5 A ... 3 A)
 - 30-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (2 A ... 30 A)
 - 300-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (30 A ... 300 A)
 - 3000-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (300 A ... 3000 A)
- Frequency range: 30 Hz ... 440 Hz
- Rated voltage: 1000 V, CAT IV

Note: Connection to the instrument is via adapter **MT3423**. The adapter has to be ordered separately.

Ord.No.	100061320
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**MT3471, flexible AC current probes 3000 A, 0.8 m**

Flexible clamping of any conductor to be measured (cable, bar, core, etc.) even on places difficult to access.

- Diameter: ca. 25 cm
- Output: 2x 4 mm safety plug connection via adapter **MT3423**
- Measuring range: 500 mA ... 3000 A
- Switchable ranges: 3 A, 30 A, 300 A, 3000 A
- Error of measurement with optimal range selection:
 - 3-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (0,5 A ... 3 A)
 - 30-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (2 A ... 30 A)
 - 300-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (30 A ... 300 A)
 - 3000-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (300 A ... 3000 A)
- Frequency range: 30 Hz ... 440 Hz
- Rated voltage: 1000 V, CAT IV

Note: Connection to the instrument is via adapter **MT3423**. The adapter has to be ordered separately.

Ord.No.	100061321
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**MT3472, flexible AC current probes 30000 A, 1.2 m**

Flexible clamping of any conductor to be measured (cable, bar, core, etc.) even on places difficult to access.

- Diameter: ca. 38 cm
- Output: 2x 4 mm safety plug connection via adapter **MT3424**
- Measuring range: 500 mA ... 30000 A
- Switchable ranges: 30 A, 300 A, 3000 A, 30000 A
- Error of measurement with optimal range selection:
 - 30-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (0,5 A ... 30 A)
 - 300-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (10 A ... 300 A)
 - 3000-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (300 A ... 3000 A)
 - 30000-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (300 A ... 30000 A)
- Frequency range: 30 Hz ... 440 Hz
- Rated voltage: 1000 V, CAT IV

Note: Connection to the instrument is via adapter **MT3424**. The adapter has to be ordered separately.

Ord.No.	100061322
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**MT3423, adapter "4 mm safety plug to D-Sub plug 25-pin", 1.0 m.**

For connecting max. three flexible current probes of the same type to the instrument.

Suitable for the types **MT3470** and **MT3471**.

Equipped with:

- 3x socket for two 4 mm safety plugs
- 1x D-Sub plug, 25-pin

Ord.No.	100032220
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**MT3424, adapter "4 mm safety plug to D-Sub plug 25-pin", 1.0 m.**

For connecting max. three flexible current probes of the same type to the instrument.

Suitable for the types **MT3472**.

Equipped with:

- 3x socket for two 4 mm safety plugs
- 1x D-Sub plug, 25-pin

Ord.No.	100032221
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Special Accessories (Quick Connection Cable)

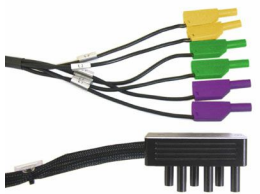


Quick connection cable for “voltage/rigid sleeve” for MT series, 2.5 m, phase colours: yellow/green/violet/black

To prevent connecting faults on the instrument's side.
Measurement category III (CAT III).

- Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 4x stackable, spring-loaded 4 mm plug with rigid insulating sleeve - 1x yellow, 1x green, 1x violet, 1x black
- Cable cross-section: 2.5 qmm

Ord.No. **100023413**



Quick connection cable for “current/rigid sleeve” for MT series, 12 A, 2.5 m, phase colours: yellow/green/violet

To prevent connecting faults on the instrument's side.

- Instrument's side: 1x 6-pin connector with anti-twist safeguard.
- Mains side: 6x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve - 2x yellow, 2x green, 2x violet.
- Cable cross-section: 2.5 qmm

Ord.No. **100023412**

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).

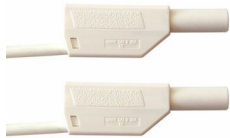
- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

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**

- 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. **X00004961****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, 3.15 A, 5 mm x 20 mm, time-lag

Ord.No. **M00460252**



Fuse 15A/ time-lag type

Ord.No. **M00460259**



Special Accessories (General)



Tripod with fixing device for MT3000 reference meter
For fixing and individual positioning of the device.
(ONLY for use with the MT3000 reference meter, NOT for the source or booster)

Ord.No. **100114804**



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**



Temperature sensor MT3450

Temperature sensor can be used for measuring of the ambient temperature on site.
 The temperature value will be displayed and stored inside the MT device
 Temperature range: -20° C ... +60° C (± 1° C)
 Resolution: 0,1° C
 Cable length: 3 m

Ord.No. **100904000**



Coaxial cable with BNC plug, 2 m

- 2x BNC plug

Ord.No. **Z09548320**



Plexiglass protection cover MT3206 for MT3201,

The modul MT3206 is made of plexiglass and serves for mechanical protection of the LCD display MT3201. To enable the access to the soft-key terminal the cover is equipped with gaps.

Ord.No. **100053200**

Readjustment (only for Service)



Adjustment of MT3000 reference standard 12 A

Note: Calibration and Calibration report are not included.

Ord.No. **100033889**



Adjustment of MT3000 reference standard 120 A

Note: Calibration and Calibration report are not included.

Ord.No. **100033888**



**Adjustment of current clamp
MT3430/3460 or MT3422/3465**

Ord.No. **101243212**

Note: Calibration and Calibration report
are not included.



Adjustment of current clamp MT3416 / MT3417

Ord.No. **100033894**

Note: Calibration and Calibration report
are not included.

Factory Calibration (only for Service)



**Factory Calibration for MT3000 12 A, 50 Hz
incl. ZERA calibration report.**

Ord.No. **100890800**

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 MT3000 120 A, 50 Hz
incl. ZERA calibration report.**

Ord.No. **100890802**

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 MT3000 12 A, 60 Hz
incl. ZERA calibration report.**

Ord.No. **100890801**

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 MT3000 120 A, 60 Hz
incl. ZERA calibration report.

Ord.No. **100890803**

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 MT3460 / MT3465 50Hz
incl. ZERA calibration report.

Ord.No. **101242304**

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 MT3416 / MT3417, 50 Hz
incl. ZERA calibration report.

Ord.No. **100519701**

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 MT3460 / MT3465 60Hz
incl. ZERA calibration report.

Ord.No. **101242305**

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.

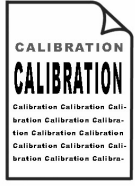


Factory Calibration for MT3416 / MT3417, 60 Hz
incl. ZERA calibration report.

Ord.No. **100519704**

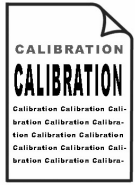
Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

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.

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