



ZERA

MT3000
Product Catalogue

Doc.No: 100352714
Version from: 01.07.2024

Device



STANDARD SET MT3000 Three Phase Reference Meter (12 A / Class 0.02)

Inclusive adjustment and calibration for one mains frequency.

Ord.No. **1016702xx**

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

MT3000 is a modular designed Reference Meter and offers optional to add modules for enhanced functions. 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 as set configuration is designed for comprehensive testing of one test specimen.

- Accuracy class: 0.02
- Measurement direct: max. 300 V / 12 A
- Measurement via clamps: max. 120 A
- MT3504 Meter Test Module 1x
- Burden measurement for instrument transformer installations
- Automatic measurement

Each inclusive the following accessories:

Qty	Description	Order-No.
1	MT3465, AC current clamp set incl. calibration	1016705xx
1	Power cord "Class I grounded Plug type E/F to IEC 60320, C13", 2.5 m	M00481006
1	Quick connection cable „voltage/rigid sleeve“ for MT s2-Serie, 2.5 m phase colours: red/yellow/blue/black	100023402
1	Quick connection cable „current/rigid sleeve“ max. 12 A for MT s2-series, 2.5 m phase colours: red/yellow/blue	100023411
1	Accessories bag with connection adapters	100023731
1	Holding device for scanning head	100319600
1	Connection cable for scanning head input (SC)	Z10353027
1	TK326, scanning head	101064901
1	Interface cable, RS232	X00010844
1	Transport case 1 with wheels for MT3000	100023900
1	USB flash drive to store	101198310



STANDARD SET
MT3000 Three Phase Reference Meter
(120 A / Class 0.02)

Inclusive adjustment and calibration
 for one mains frequency.

Ord.No. **1016706xx**

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

MT3000 is a modular designed Reference Meter and offers optional to add modules for enhanced functions. 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 as set configuration is designed for comprehensive testing of one test specimen.

- Accuracy class: 0.02
- Measurement direct: max. 600 V / 120 A
- Measurement via clamps: max. 120 A
- MT3504 Meter Test Module 1x
- Burden measurement for instrument transformer installations
- Automatic measurement

Each inclusive the following accessories:

Qty	Description	Order-No.
1	MT3465, AC current clamp set incl. calibration	1016705xx
1	Power cord "Class I grounded Plug type E/F to IEC 60320, C13", 2.5 m	M00481006
1	Quick connection cable „voltage/rigid sleeve“ for MT s2-Serie, 2.5 m phase colours: red/yellow/blue/ black	100023402
2	Current cable up to 120 A, double-side socket, 2.0 m, red	101197922
2	Current cable up to 120 A, double-side socket, 2.0 m, yellow	101197924
2	Current cable up to 120 A, double-side socket, 2.0 m, blue	101197923
6	Plug-in adapter pin-pin	Z10120112
1	Accessories bag with connection adapters	100023731
1	Holding device for scanning head	100319600
1	Connection cable for scanning head input (SC)	Z10353027
1	TK326, scanning head	101064901
1	Interface cable, RS232	X00010844
1	Transport case 1 with wheels	100023900



MT3000 Three Phase Reference Meter (12 A / Class 0.02)

Inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016703xx**

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

MT3000 is a modular designed Reference Meter and offers optional to add modules for enhanced functions. MT3000 is configured for testing of one test specimen.

Configuration:

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



MT3000 Three Phase Reference Meter (12 A / Class 0.05)

Inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016704xx**

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

MT3000 is a modular designed Reference Meter and offers optional to add modules for enhanced functions. MT3000 is configured for testing of one test specimen.

Configuration:

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



**MT3000 Three Phase Reference Meter
(120 A / Class 0.02)**

Inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016707xx**

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

MT3000 is a modular designed Reference Meter and offers optional to add modules for enhanced functions. MT3000 is configured for testing of one test specimen.

Configuration:

- Direct current measurement up to 600 V / 120 A
- Accuracy for power/energy measurement: < ±0.02 %
- 1x MT3405 Meter Test Module
- Burden measurement for instrument transformer installations



**MT3000 Three Phase Reference Meter
(120 A / Class 0.05)**

Inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016708xx**

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

MT3000 is a modular designed Reference Meter and offers optional to add modules for enhanced functions. MT3000 is configured for testing of one test specimen.

Configuration:

- Direct current measurement up to 600 V / 120 A
- CT current measurement up to 120 A
- Accuracy for power/energy measurement: < ±0.05 %
- 1x MT3405 Meter Test Module
- Burden measurement for instrument transformer installations

Power Cords



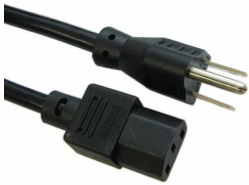
Power cord "Class I grounded plug type E/F to IEC 60320 C13", 2.5 m

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 "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

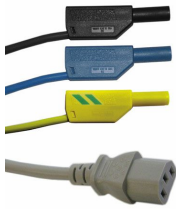


**Power cord "Plug type H"
to IEC 60320 C13", 1.8 m**

For supply via power socket.

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

Ord.No. **100929903**



**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 120 A

The CT set is electronically compensated. Calibration independent from the measuring standard inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016705xx**

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

DAkKS calibrations are only performed together with the corresponding measuring standard.

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

**MT3417, AC current clamp set 300 A**

The CT set is electronically compensated. Calibration independent from the measuring standard inclusive adjustment and factory calibration for one mains frequency.

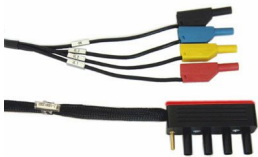
Ord.No.	1016713xx
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Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkKS 50 Hz	xx → 02
DAkKS 60 Hz	xx → 03

DAkKS calibrations are only performed together with the corresponding measuring standard.

- 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
- Overvoltage Category: CAT III 600 V / CAT IV 300 V

Quick Connection Cable (see also Special Accessories)

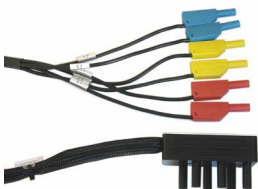


Quick connection cable "voltage/rigid sleeve" for MT series, 2.5 m, phase colours: red/yellow/blue/black

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
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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
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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**



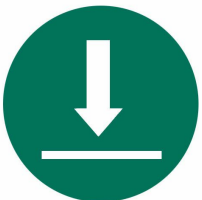
Current cable up to 120 A, boothside socket, 1.0 m, for connection between source and reference meter.

- 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



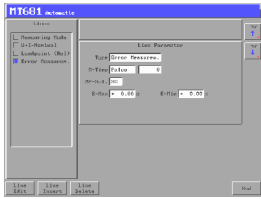
Software SSM3000 / MTVis

The software runs under Windows 7 or 10.

- SSM3000: For external control via PC.
- MTVis: To readout and display saved data.

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

Ord.No. **100090720**



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 MT3703 WinSAM control software is used to create test sequences and for carrying out automatic tests. The software will be installed and configured on an external control computer/Laptop (PC).

The software package contains:

- 1 x USB memory stick with the MT3703 WinSAM Setup file
- 1 x USB-Dongle with the WinSAM license

The installation and configuration of the WinSAM software on the customer's PC can be carried out either at ZERA or remotely via an internet remote session. A customer PC with administrator rights and a stable internet connection are mandatory for remote session.

Ord.No. **100061700**



Installation and Configuration

Installation and configuration of WinSAM software on customer PC, if required.

Only valid with a bundle purchase of the MT3703 WinSAM or WinSAM-EMOB software.

Max. duration of the Internet remote session approx. 4 hours.

Ord.No. **100005646**

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**

**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**

**ZZ8636 Start-stop pushbutton for signal entry**

The start-stop pushbutton is used for manual pulse 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 | 101584400 |
| 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 Flash Drive

To store customer data and measuring values. Provides easy data transfer from the instrument to the PC. This flash drive is special formatted for ZERA instruments.

Ord.No.

101198310



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**



MT3204, display protection cover

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

Ord.No. **Z10342400**



Coaxial cable with BNC plug, 2 m

- 2x BNC plug

Ord.No. **Z09548320**

Documentation



Complete Documentation

as pdf files on USB flash drive

Ord.No. **100090716**

Special Assesories (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**



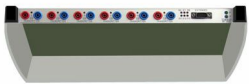
MT3502 Meter module 2

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**



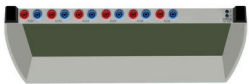
MT3503 - Meter module 3

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**



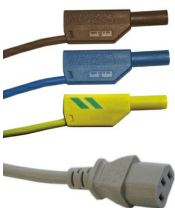
MT3303 Small signal measuring module

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 the MT device 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 the MT device via input for direct current measurement.

Ord.No. **100032401**

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

Flexible clamping adapter for enclosing conductors of any shape and in areas 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 adapter for enclosing conductors of any shape and in areas 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 adapter for enclosing conductors of any shape and in areas 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**

**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**

**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**

Special Accessories (Quick Connection Cable)

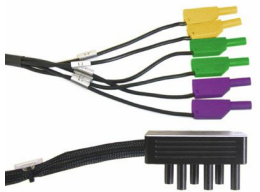


Quick connection cable for “voltage/rigid sleeve” for MT series, 2.5 m, phase colours: yellow/green/violet/black

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).

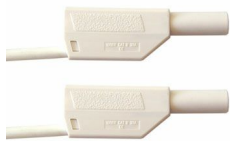
- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

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. **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)****TK117, infrared data scanning head**

For detection of metrological infrared signals and for communication between meter and test system.

- Fixing: Via integrated magnet
- Cable length: 2 m

Ord.No. **X00009942****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 plug 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, 5 mm x 20 mm, time-lag**Ord.No. **M00460259****Special Accessories (General)****Tripod with fixing device for MT3000 reference meter**

For mounting and customized positioning of the measuring standard on site.

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**



MT3450, Temperature sensor
 Sensor for measuring of the ambient temperature on site. The measured temperature value is displayed and saved in the MT device.
 Temperature range: -20° C ... +60° C ($\pm 1^\circ$ C)
 Resolution: 0,1° C
 Cable length: 3 m

Ord.No. **100904000**



MT3206, Plexiglass protection cover for MT3000
 The cover is made of plexiglass and serves for mechanical protection of the LCD display. To enable the access to the soft-key keyboard the cover is designed with cut-outs.

Ord.No. **100053200**

Readjustment (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.

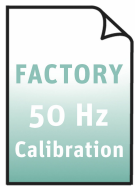


Adjustment of current clamp MT3416 / MT3417

Ord.No. **100033894**

Note: Calibration and Calibration report
are not included.

Calibration (for Service)

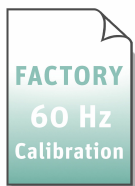


Factory Calibration for MT3000 12 A, 50 Hz
incl. ZERA calibration report.

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.

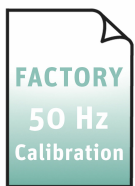


Factory Calibration for MT3000 12 A, 60 Hz
incl. ZERA calibration report.

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.

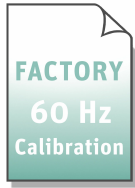


Factory Calibration for MT3000 120 A, 50 Hz
incl. ZERA calibration report.

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.

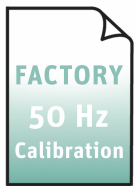


Factory Calibration for MT3000 120 A, 60 Hz
incl. ZERA calibration report.

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.

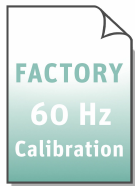


Factory Calibration for MT3460 / MT3465 50Hz
incl. ZERA calibration report.

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.

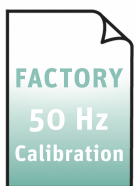


Factory Calibration for MT3460 / MT3465 60Hz
incl. ZERA calibration report.

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.

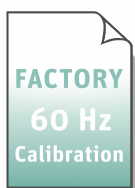


Factory Calibration for MT3416 / MT3417, 50 Hz
incl. ZERA calibration report.

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 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**



Factory Calibration
for current clamps, each additional
load point for for power and energy

Ord.No. **100007092**

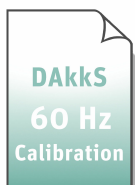


DAkKS DKD-Calibration for MT3000 12 A, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

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 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.

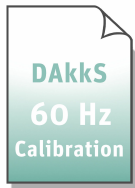


DAkKS DKD-Calibration for MT3000 120 A, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

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 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.

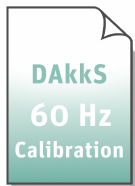


DAkKS DKD-Calibration for MT3460 / MT3465, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

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 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, 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 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 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**



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

Ord.No. **100006892**

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Notes on using the product catalogue

When ordering, always state the order number.

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