



---

**ZERA**

**MT400**  
**Product Catalog**

Doc.No: 100352706  
Version from: 24.02.2010

---

---

## Device



### Three phase current and voltage source MT400

Including adjustment and standard factory calibration.  
The portable source MT400 provides current and voltage for on site testing of meter installations with low voltage.

- Supplied via test voltage or mains voltage
- Current generation up to 12 A
- Synchronization of the test currents on the existing test voltage phases of the meter under test.
- Balanced/Unbalanced load conditions
- Individual phase angle setting
- Vector display of generated and measured values

Ord.No. **100248100**

## Adjustment and Calibration / Device



### Readjustment of MT400

*Note:* With initial purchase of an instrument the adjustment is included. This article only applies to a readjustment.

Ord.No. **100033898**



### Factory calibration of a new instrument MT400 according to ZERA standard, 50 Hz

*Note:* This article only applies to a purchase of a new instrument MT400.

- Including factory calibration certificate

Ord.No. **100519710**



### Factory re-calibration of MT400 according to ZERA standard, 50 Hz

*Note:* With initial purchase of an instrument the factory calibration is included. This article only applies to a re-calibration.

- Including factory calibration certificate

Ord.No. **100519712**



### DKD calibration of MT400, 50 Hz

- Including DKD calibration certificate

Ord.No. **100519612**



**Factory calibration of a new instrument MT400 according to ZERA standard, 60 Hz**

*Note:* This article only applies to a purchase of a new instrument MT400.

- Including factory calibration certificate

Ord.No. **100519711**



**Factory re-calibration of MT400 according to ZERA standard, 60 Hz**

*Note:* With initial purchase of an instrument the factory calibration is included. This article only applies to a re-calibration.

- Including factory calibration certificate

Ord.No. **100519713**



**DKD calibration of MT400, 60 Hz**

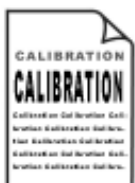
- Including DKD calibration certificate

Ord.No. **100519613**



**Calibration, each additional load point for current and/or voltage, DKD**

Ord.No. **100006894**



**Calibration, each additional load point for current and/or voltage, factory calibration**

Ord.No. **100007094**

## Power Cords



### Power cord "Euro plug type C to figure-of-eight", 2.0 m

For supply via mains supply.

- 1x Euro plug type C (CEE 7/16)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100067700**



### Power cord "Plug type A to figure-of-eight", 2.0 m

For supply via mains supply.

- 1x Plug type A
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100277201**



### Power cord "Plug type G to figure-of-eight", 2.0 m

For supply via mains supply.

- 1x Plug type G (BS1363)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100277200**



### Power cord "Plug type I to figure-of-eight", 2.0 m

For supply via mains supply.

- 1x Plug type I (AS/NZS 3112, 2-pin)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100277202**



### Power cord "stackable safety plug (black) to figure-of-eight", 2.0 m

For supply via test voltage.

- 2x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve (2x black)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100067608**



**Power cord “axial safety plug (black/yellow) to figure-of-eight”, 2.0 m**

For supply via test voltage.

- 2x 4 mm axial safety plug (1x black/1x yellow)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100067601**



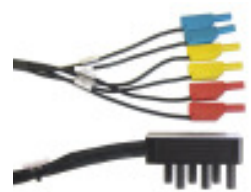
**Power cord “axial safety plug (violet/yellow) to figure-of-eight”, 2.0 m**

For supply via test voltage.

- 2x 4 mm axial safety plug (1x violet/1x yellow)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100067602**

## Quick Connection Cable



**Quick connection cable “current/rigid sleeve” for source, MT series, 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. **100023457**



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

To prevent connecting faults on the instrument’s side.

- 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. **100023454**

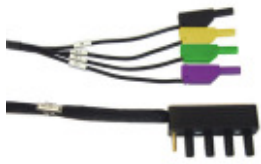


**Quick connection cable for “current/rigid sleeve” for MT series, 12 A, 2.5 m, phase colours: yellow/green/violet**

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. **100023419**



**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.

- 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. **100023418**



**Quick connection cable “voltage/rigid sleeve” for source-instrument, MT series, 2.5 m, phase colours: red/yellow/blue/black**

When using source and instrument. Two connectors on the instrument’s side to connect source and instrument.

- Instrument’s side:
  - 1x 4-pin connector with anti-twist safeguard.
  - 1x 4-pin connector (slim) without 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. **100023456**



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

When using source and instrument. Two connectors on the instrument’s side to connect source and instrument.

- Instrument’s side:
  - 1x 4-pin connector with anti-twist safeguard.
  - 1x 4-pin connector (slim) without 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. **100023462**



**Quick connection cable “current/rigid sleeve” for source-instrument, MT series, 2.5 m, phase colours: red/yellow/blue**

When using source and instrument. Two connectors on the instrument's side to connect source and instrument.

- Instrument's side:
  - 1x 6-pin connector with anti-twist safeguard.
  - 1x 6-pin connector, sloped, 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. 100023455



**Quick connection cable “current/rigid sleeve” for source-instrument, MT series, 2.5 m, phase colours: yellow/green/violet**

When using source and instrument. Two connectors on the instrument's side to connect source and instrument.

- Instrument's side:
  - 1x 6-pin connector with anti-twist safeguard.
  - 1x 6-pin connector, sloped, 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. 100023461



**Quick connection cable “voltage/retractable sleeve” with Entrelec box for MT series, 2.5 m, phase colours: red/yellow/blue/black**

When using source and instrument. Cable with Entrelec box for quick connection of source and instrument.

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

Ord.No. 100013322



**Quick connection cable “current/retractable sleeve” with Entrelec box for MT series, 2.5 m, phase colours: red/yellow/blue**

When using two single devices for source and instrument. Cable with Entrelec box for quick connection of source and instrument.

- Instrument's side: 1x 6-pin connector with anti-twist safeguard.
- Mains side: 1x multipoint Entrelec plug
- Cable cross-section: 2.5 qmm

Ord.No. 100013222



**Quick connection cable "voltage/Entrelec" with Entrelec box for MT series, 2.5 m, phase colours: red/yellow/blue/black**

When using two single devices for source and instrument. Cable with Entrelec box for quick connection of source and instrument.

- Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 1x multipoint Entrelec plug
- Cable cross-section: 2.5 qmm

Ord.No. **100013321**



**Quick connection cable "current/Entrelec" with Entrelec box for MT series, 2.5 m, phase colours: red/yellow/blue**

When using two single devices for source and instrument. Cable with Entrelec box for quick connection of source and instrument.

- Instrument's side: 1x 6-pin connector with anti-twist safeguard.
- Mains side: 1x multipoint Entrelec plug
- Cable cross-section: 2.5 qmm

Ord.No. **100013221**

## Laboratory Cables



**Laboratory cable with stackable plug, red, 2.0 m**

- 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**

- 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**

- 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**

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

Ord.No. **X00006910****Laboratory cable with stackable plug, green, 2.0 m**

- 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**

- 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**

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

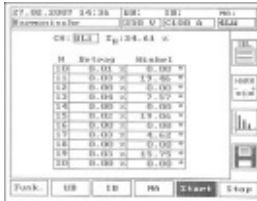
Ord.No. **100414100**

## Software

**CD-ROM with software SSM3000 / MTVis / WM303**

- SSM3000: To control the instrument.
- MTVis: To readout and display data saved in the instrument.
- WM303: To control WM303-I and WM303-U.
- Operating system: Windows XP

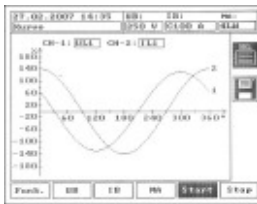
Ord.No. **100090704**



### Software option for harmonic measurement, MT400/MT500

The harmonic measurement displays the value and angle of each single harmonic (voltage and current) up to the 40<sup>th</sup> in a chart or a diagram. Additionally the sum of all harmonics is displayed.

Ord.No. **100078830**



### Software option for curve display, MT400/MT500

For simultaneous display of two curves (voltage and/or current measurement channels). Via the curve display you can see at a glance if the fundamental frequency differs from the sinus curve.

Ord.No. **100078831**

## Documentation



### Operation manual for MT400, English

Ord.No. **100367311**



### Operation manual for MT400, Italian

Ord.No. **100367312**

## Small Parts and Accessories Bag for Small Parts



### Accessories bag with connection adapters

01	Accessories bag	100214400	Ord.No.	<b>100023726</b>
03	Spring clip	Z09508700		
04	4 mm plug adapter (banana plug)	X00004962		
06	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, 16 A / 500 V, 6.3 mm x 32 mm, very fast acting	M00460189		
10	Fuse, 6.3 A / 500 V, 6.3 mm x 32 mm, time-lag	100358600		

### Fuse, 16 A / 500 V, 6.3 mm x 32 mm, very fast acting

Ord.No. **M00460189**



### Fuse, 6.3 A / 500 V, 6.3 mm x 32 mm, time-lag

Ord.No. **100358600**



## Transport



### Aluminium case with cable tray, small

Hard-top case with inlet. To transport MT400/MT500 and accessories.

- Dimensions: H 440 mm × W 470 mm × D 250 mm

Ord.No. **100325700**



### Aluminium case without cable tray, small

Hard-top case with inlet. To transport MT400/MT500 and accessories.

- Dimensions: H 370 mm × W 450 mm × D 250 mm

Ord.No. **100325701**



**Nylon protective bag for MT400/MT500**  
 Inner dimensions: H 340 mm x W 290 mm x D 235 mm

Ord.No. **100062802**



**Shoulder bag**  
 Nylon shoulder bag for transport of accessories.  
 • Dimensions: H 410 mm x W 320 mm x D 170 mm

Ord.No. **100148201**

## Additional Accessories for The Device



**Interface cable, RS232, cross wired  
 (null modem cable)**

Cross wired connection cable.  
 • 2x D-Sub socket, 9-pin  
 • Cable length: 3.00 m

Ord.No. **X00010844**



**Displayschutz für MT-Serie 3xx/400/500**  
 Zum Schutz der Frontplatte gegen  
 mechanische Stöße während des  
 Gerätetransports ohne Transportkoffer.

Ord.No. **100466700**



**Adapter "USB to RS232"**  
 For use with an external PC/notebook.  
 Can be used with Windows Vista.

Ord.No. **100286701**

---

ZERA GmbH  
Hauptstraße 392  
D-53639 Königswinter  
Phone: +49 (0)2223 704-0  
Fax: +49 (0)2223 704-70  
E-mail: [zera@zera.de](mailto:zera@zera.de)  
Internet: [www.zera.de](http://www.zera.de)  
Managing Directors:  
Dr. Prosper Suwelack / Rainer Otto  
Headquarter: Königswinter

---



## 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](http://www.zera.de)

Deutsche Bank Bonn  
bank code: 380 700 59  
account: 005 705 150 0  
IBAN: DE16 3807 0059 0057 0515 00  
SWIFT: DEUTDEDK380

Commerzbank Bonn  
bank code: 380 400 07  
account: 113 313 100  
IBAN: DE29 3804 0007 0113 3131 00  
SWIFT: COBADEFF380

Kreissparkasse Köln  
bank code: 370 502 99  
account: 001 078 492  
IBAN: DE15 3705 0299 0001 07  
SWIFT: COKSDE33

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

---