



ZERA

MT10
Product Catalogue

Doc.No: 100352709
Version from: 01.07.2022

Device



MT10 Single Phase Reference Meter CATIII

Inclusive adjustment for one mains frequency.

Ord.No. **101073301**

MT10 is light weight and Compact Reference Meter for on-site verification and calibration of single phase domestic meters.

Test voltage for the Compact Reference Meter will be measured at the mains on site. Test current must be measured via current clamp (option).

MT10 is designed for testing of max. 1 test specimen.

Configuration:

- Direct current measurement up to 300 V / -- A *
- Accuracy for power/energy measurement: < ± 0.2 % by using of MT3461 current clamp type
- Power supply via external unit
- Rechargeable battery operation (optional)

* Current measurements only via current clamp



MT10 Single Phase Reference Meter CAT IV

Inclusive adjustment for one mains frequency.

Ord.No. **101073401**

MT10 is light weight and Compact Reference Meter for on-site verification and calibration of single phase domestic meters.

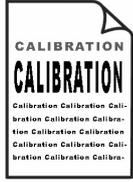
Test voltage for the Compact Reference Meter will be measured at the mains on site. Test current must be measured via current clamp (option).

MT10 is designed for testing of max. 1 test specimen.

Configuration:

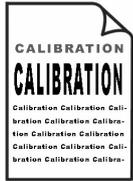
- Direct current measurement up to 300 V / -- A *
- Voltage input designed for protection class **CATIV**
- Accuracy for power/energy measurement: < ± 0.2 % by using of MT3461 current clamp type
- Power supply via external unit
- Rechargeable battery operation (optional)

* Current measurements only via current clamp



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

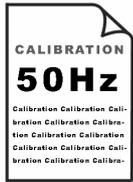
Ord.No. **100007093**



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 MT10, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100519614**

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 MT10
incl. current clamp MT3461, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **101173914**

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.

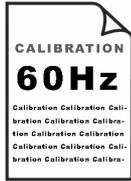


DAkKS DKD-Calibration of MT10, 60 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100519616**

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.

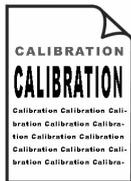


**DAkKS DKD-Calibration for MT10
incl. current clamp MT3461, 60 Hz**
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **101173915**

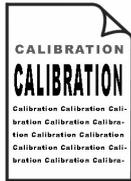
Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

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



AC Power Supply for MT10/30
to operate and recharge internal batteries.
Input voltage 90...264 VAC
Output voltage 16 VDC
AC power cord for mains has to be
ordered separately.

Ord.No. **100307130**



AC Power Supply for MT10/30 with fuse
to operate and recharge internal batteries.
Input voltage 90...264 VAC
Output voltage 16 VDC
In case of overvoltage connection power supply will
be protected by internal security circuit and fuse.
Fuse rating: 1,6 A / 440 V
AC power cord for mains and spare fuses has to
be ordered separately.

Ord.No. **101097300**

Fuse, 1.6 A / 440 V, 6.3 mm x 32 mm, time-lagOrd.No. **m00460183****Power cord "Plug type A to figure-of-eight", 2.0 m**Ord.No. **100277201**

For supply via mains supply.

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

Power cord "Euro plug type C to figure-of-eight", 2.0 mOrd.No. **100067700**

For supply via mains supply.

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

Power cord "Plug type G to figure-of-eight", 2.0 mOrd.No. **100277200**

For supply via mains supply.

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

Power cord "Plug type I to figure-of-eight", 2.0 mOrd.No. **100277202**

For supply via mains supply.

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

Battery Pack and Accessories



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

Current Clamps



MT3461, AC current clamp 120 A

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:
 - < $\pm 0.15\%$ / < 0.1° (500 mA ... 120 A)
 - < $\pm 0.3\%$ / < 0.1° (100 mA ... 500 mA)
 - < $\pm 0.6\%$ / < 0.1° (25 mA ... 50 mA)
- Frequency range: 45 ... 65 Hz
- Measuring Category: CAT IV 300 V /CAT III 600 V

Ord.No.

101241502

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, 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



CAT IV Laboratory cable max. 12 A, 2.0 m

- 2x 4 mm plugs (non-stackable) with rigid insulating sleeve
- Lead cross section: 1 qmm
- Phase colours: Please specify the colour code when ordering

The cables will get a corresponding coloured marking.

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

Ord.No. **1014308xx**

xx please select the colour

Software



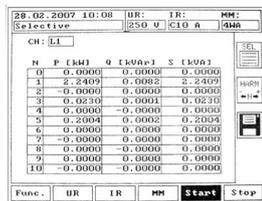
Software SSM3000 / MTVis

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 for selective power measurement, MT10 / MT30

3 additional measuring modes for only fundamental power in 4W active, 4W reactive and 4W apparent are available

Ord.No. **100078811**

Impulse Sensor (see also Special Accessories)



ZZ8636 Start-stop pushbutton for signal entry

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

Ord.No. **101091620**



TK118, scanning head

For detection of LED signals of electronic meters.

- Fixing: Via provided suction cup or via optionally available stretchable holding device for scanning heads TK326/TK118.

Ord.No. **100201900**



TK326-1, scanning head without holding device

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

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

Ord.No. **101064901**



Holding device for scanning head TK326/ TK118

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

- Maximum wingspan: 19.0 cm.

Ord.No. **100319600**



K121, S0 pulse converter with measuring leads

For pulse detection of floating contacts as well as of S0 pulse output on electricity meters. Including two laboratory cables with safety plug/connection pin.

Ord.No. **100004210**



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

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**

Connectors (see also Special Accessories)



Accessories bag with connection adapters

- 1x Accessories bag (100214400)
- 1x Spring clip (100606750)
- 2x 4 mm plug adapter (banana plug) (X00004962)
- 2x Adapter for terminal blocks (101584400)
- 1x 4 mm test clips (crocodile clips), slim (X00009329)
- 1x 4 mm test clips (crocodile clips), wide (X00010059)

Ord.No. **100023725**

Transport (see also Special Accessories)



Transport Case for MT10 / MT30, large

Aluminum case with inlet from rigid foam, designed for

- 1 Instrument
- Accessories

Overall dimensions: 47 cm x 53,5 cm x 18 cm (H x W x D)

Please clarify whether the case size is suitable for the ordered accessories.

Ord.No. **100023990**



Transport Case for MT10 / MT30, Standard

Aluminum case with inlet from rigid foam, designed for

- 1 Instrument
- Accessories

Overall dimensions: 36 cm x 45 cm x 17 cm (H x W x D)

Please clarify whether the case size is suitable for the ordered accessories.

Ord.No. **100023981**

Standard Accessories (see also Special Accessories)



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

Connection cable

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

Ord.No. **X00010844**



Li-Ion Battery, set of 3 (M00400491)

- 3,7 V/2200 mAh

Ord.No. **100619500**

Please remark that Li-Ion batteries are classified as “Dangerous Good for Shipment”. Sending Li-Ion batteries as spare part by air requires a lot of strict security procedures. Therefore, ZERA can only offer this spare part batteries as EXW (Incoterms). The purchaser will be responsible for the transportation.

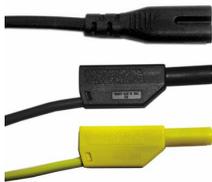
Documentation



Complete documentation as pdf files on USB Stick

Ord.No. **100090716**

Special Accessories

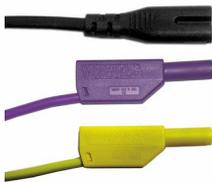


Power cord “stackable safety plug (black/yellow) to figure-of-eight”, 2.0 m

For supply via test voltage.

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

Ord.No. **100067601**



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

For supply via test voltage.

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

Ord.No. **100067602**

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****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**

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**

Special Accessories (Transport)



Carrying strap for reference meter, black, width 25 mm

Belt length: 700 - 1,400 mm, adjustable by sliding buckle, metal snap hooks on both sides.

Ord.No. **100170000**

Special Accessories (General)



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

Ord.No. **101421801**



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**

Readjustment (only for Service)



Adjustment of MT10

Note: Calibration and Calibration report are not included.

Ord.No. **100033857**

Factory Calibration (only for Service)



Factory Calibration for MT10, 50 Hz
 incl. ZERA calibration report.

Ord.No. **100519714**

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 MT10 incl. current clamp MT3461, 50 Hz
 incl. ZERA calibration report.

Ord.No. **100890849**

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.

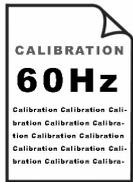


Factory Calibration for MT10, 60 Hz
incl. ZERA calibration report.

Ord.No. **100519716**

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.

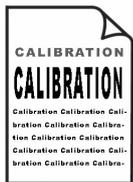


**Factory Calibration for MT10 incl. current clamp
MT3461, 60 Hz**
incl. ZERA calibration report.

Ord.No. **100890850**

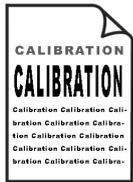
Load points according to ZERA regulations.
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**Factory Calibration
for instrument, each additional
load point for power and energy**

Ord.No. **100007093**



**Factory Calibration
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Ord.No. **100007094**

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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