

# **ZERA**

# MT551

## **Product Catalogue**

Doc.No: 100352717 Version from: 01.07.2022

#### Device



## MT551 Three Phase Current/Voltage Source Inclusive adjustment for one mains frequency.

Ord.No.

101383001

*MT551* is designed for generation of test voltage and test current for max. 1 test specimen.

#### **Configuration:**

- 3~ phase voltage generation up to 500 V (AC)
- 3~ phase current generation up to 120 A (AC)
- · Easy user-guidance via touch screen

#### **Factory Calibration for New Instrument**



Factory Calibration for NEW MT551, 50 Hz incl. ZERA calibration report.

Ord.No.

100519776

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 MT551, 60 Hz incl. ZERA calibration report.

Ord.No.

100519777

This article applies only for a purchase of new device.

#### Load points according to ZERA regulations.

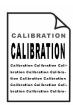
Summary of used load points can be downloaded at www.zera.de.

Additional load points are subject to charges.



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

Ord.No.



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 MT551, 50 Hz** incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No.

100519660

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 MT551, 60 Hz** incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No.

100519661

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.

#### **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 $\mbox{m}$

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.



## 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

Ord.No.

100067609

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

#### **Quick Connection Cable (see also Special Accessories)**



Quick connection cable for "current/rigid sleeve", 2.5 m, phase colours: red/yellow/blue (max. 24 A) for MT681, MT551, MT78x

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 plug with rigid insulating sleeve
- 2x red, 2x yellow, 2x blue
- Cable cross-section: 2.5 qmm

Ord.No. 100023408



# 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



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

Ord.No.

100023456

For the connection of <u>source</u> and <u>reference standard</u> if they are used as separate devices.

Cable length between the devices is 1.65 m.

- Reference standard'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



# Quick connection cable "current/rigid sleeve" for source MT551, MT series, 2.5 m, phase colours: red/yellow/blue -> max. 12A

For the connection of <u>source</u> and <u>reference standard</u> if they are used as separate devices.

Cable length between the devices is 1.65 m.

- Instrument's side:
- 1x 6-pin connector with anti-twist safeguard. 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. 101129501

### 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 gmm
- Phase colours: Please specify the colour code when ordering. The cables will get a corresponding coloured marking.

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

xx please select the colour





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.



#### Plug-in Adapter cable lug 10,5 mm closed

For current connection via screw terminals, realised as brass silver plated. The two sides of the pin has different connectors and functions.

- 1 Side 6 mm pin for test leads
- 1 Side 10,5 mm-cable lug closed in for screw terminals

The 6 mm pin is special designed for ZERA 6 mm socket system used with current test leads.

Ord.No. **100640907** 



## Current cable up to 120 A, double-side socket, 1.0 m, for connection between source and reference meter.

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

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

xx please select the colour

#### Ord.No. **1012006xx**

#### **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 Curve Definition**

Software module for generation of harmonic signals:

- Voltage up to 40<sup>th</sup> max. amplitude 40% from fundamental
- Current up to 40<sup>th</sup> max. amplitude 40% from fundamental

The module included also defining of programmable wave forms in current and/or voltage line.

#### 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 X00009329
(crocodile clips), slim

03 4 mm test clips X00010059

(crocodile clips), wide 10 Fuse, 5 A, 5 mm x 20 mm, M00460136

semi time-lag

### **Transport (see also Special Accessories)**



## Transport Case with wheels for MT3000[S] / MT3000[B] / MT3606[TS] / MT551

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

- 1 Instrument
- Accessories

Overall dimensions:  $62,2 \text{ cm x } 49,2 \text{ cm} \times 35,5 \text{ cm}$  (H x W x D)

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



#### Accessories bag

Nylon bag with inlet from rigid foam, designed for

- · Test leads
- · Scanning head
- · Current clamps
- Ftc

Overall dimensions: 41 cm x 31 cm × 16 cm (H x W x D)

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

### 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.

Ord.No.

Ord.No.

Ord.No.

100023735

100023902

101198310



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

Connection cable

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

Ord.No. **X00010844** 



#### Coaxial cable with BNC plug, 2 m

• 2x BNC plug

Ord.No. **Z09548320** 



#### 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 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



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

Ord.No.

100067611

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

#### **Special Accessories (Quick Connection Cable)**



#### Quick Acting Connection Cable for Current / 24A

The Quick connection cable set consists of a fixed detachable block for the MT system and 4mm safety plugs for the connection at the unit under test. (brown, black, red)

Ord.No. 100023409



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

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 brown, 1x black, 1x red, 1x blue
- · Cable cross-section: 2.5 qmm

Ord.No. **100023410** 



## Quick connection cable for "current/rigid sleeve", 2.5

phase colours: yellow/green/violet (max. 24 A) for MT68x, MT551, MT78x

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 plug with rigid insulating sleeve 2x yellow, 2x green, 2x violet
- Cable cross-section: 2.5 qmm



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

Ord.No.

100023418

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



# Quick connection cable "voltage/rigid sleeve" for source-instrument, MT series, 2.5 m, phase colours: vellow/green/violett/black

For the connection of <u>source</u> and <u>reference standard</u>. Cable length between the devices is 1.65 m.

- 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 violett, 1x black
- Cable cross-section: 2.5 gmm



# Quick connection cable "voltage/rigid sleeve" for source-instrument, MT series, 2.5 m, phase colours: black/brown/red/blue

For the connection of <u>source</u> and <u>reference standard</u>. Cable length between the devices is 1.65 m.

- · 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 black, 1x brown, 1x red, 1x blue
- Cable cross-section: 2.5 qmm

Ord.No. 100023462

Ord.No.



# Quick connection cable "current/rigid sleeve" for source MT551, MT series, 2.5 m, phase colours: black/brown/grey

Ord.No.

100023496

For the connection of <u>source</u> and <u>reference standard</u> if they are used as separate devices.

Cable length between the devices is 1.65 m.

- · 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 black, 2x brown, 2x grey.
- Cable cross-section: 2.5 gmm



# Quick connection cable "current/rigid sleeve" for source-instrument, MT series, 2.5 m, phase colours: brown/black/white

Ord.No.

100023485

For the connection of <u>source</u> and <u>reference standard</u> if they are used as separate devices.

Cable length between the devices is 1.65 m.

- 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 brown, 2x black, 2x white.
- Cable cross-section: 2.5 gmm



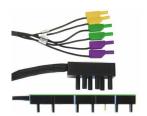
# Quick connection cable "voltage/rigid sleeve" for source-instrument, MT series, 2.5 m, phase colours: brown/black/white/blue

For the connection of <u>source</u> and <u>reference standard</u> if they are used as separate devices.

Cable length between the devices is 1.65 m.

- Reference standard'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 brown, 1x black, 1x white, 1x blue
- Cable cross-section: 2.5 qmm

Ord.No.



# Quick connection cable "current/rigid sleeve" for source MT551, MT series, 2.5 m, phase colours: yellow/green/violet -> max. 12A

Ord.No.

101129502

For the connection of <u>source</u> and <u>reference standard</u> if they are used as separate devices.

Cable length between the devices is 1.65 m.

- · Instrument's side:
  - 1x 6-pin connector with anti-twist safeguard. 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 gmm



Quick connection cable "current/rigid sleeve", 12 A, 2.5 m

phase colours: brown/black/white

for MT681, MT78x

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 brown, 2x black, 2x white
- Cable cross-section: 2.5 qmm

Ord.No. 100023494

### 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 gmm

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

100414100 Ord.No.



#### 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

• Isulating screw joint for flexible wire connection max cable size 1,5 ... 16 mm<sup>2</sup>

 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.



• Plug: 4 mm spring-loaded plug, made of brass.

 Socket: 4 mm rigid socket in insulator accepting springloaded 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 springloaded 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 springloaded 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 springloaded 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



Ord.No. **M00460136** 



#### **Special Accessories (General)**



USB2.0 connection cable, 1.5 m, A to B

Ord.No. **X00011922** 



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).

### Readjustment (only for Service)



#### Adjustment of MT551

Note: Calibration and Calibration report are not included.

Ord.No.

100033893

#### **Factory Calibration (only for Service)**



Factory Calibration for MT551, 50 Hz

incl. ZERA calibration report.

Ord.No. 100519778

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 MT551, 60 Hz

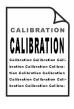
incl. ZERA calibration report.

Ord.No. 100519779

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.



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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