



MT30 Product Catalogue

Doc.No: 100352703 Version from: 01.07.2024

1016656xx

Ord.No.

Device



STANDARD SET

MT30 Three-Phase Reference Meter CAT III Inclusive adjustment and factory calibration for <u>one</u> mains frequency.

Calibration	Ord.No.
Factory 50 Hz	$xx \rightarrow 00$
Factory 60 Hz	$xx \rightarrow 01$
DAkkS 50 Hz	$xx \rightarrow 02$
DAkkS 60 Hz	$xx \rightarrow 03$

The MT30 is a light weight and compact Reference Meter for on-site verification and calibration of single- or three-phase domestic meters.

Test voltage can be measured by the Reference Meter directly from the mains. Test current must be measured via current clamps.

The MT30 is designed for testing of one test specimen.

- Accuracy class: 0.2 by using of MT3460 current clamp type
- Measurement direct: max. 300 V
- Measurement via clamps: max. 120 A
- Power supply via external unit
- Rechargeable battery operation (battery warranty 6 months)
- Selective power measurement

Each inclusive the following accessories:

	*******************************	<u></u>
Qty	Description	Order No.
1	MT3460, AC current clamp set incl. calibration	1016683xx
1	AC power supply for MT30	100307130
1	Power cord "Euro plug type C to figure-of-eight", 2.0 m	100067700
1	Power cord "stackable safety plug (black) to figure-of-eight" 2.0 m	100067608
1	Li-lon battery, set of 3	100619500
1	Laboratory cable with stackable plug, 2.0 m black	X00006910
1	Laboratory cable with stackable plug, 2.0 m red	X00007597
1	Laboratory cable with stackable plug, 2.0 m yellow	X00006907
1	Laboratory cable with stackable plug, 2.0 m blue	X00007598
1	Accessories bag with connection adapters	100023723
1	Holding device for scanning head	100319600
1	Connection cable for scanning head input (SC)	Z10353027
1	TK326, scanning head	101064901

1016657xx

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Ord.No.

Ord.No.

1	Interface cable, RS232	X00010844
1	Carrying strap for reference	100170000
	meter, black, width 25 mm	
1	Transport case for MT30,	100023981
	Standard	
1	Complete documentation as	100090716
	pdf files on USB flash drive	



MT30 Three-Phase Reference Meter CAT III

Inclusive MT3460, adjustment and factory calibration for <u>one</u> mains frequency.

Calibration	Ord.No.	
Factory 50 Hz	$xx \rightarrow 00$	
Factory 60 Hz	$xx \rightarrow 01$	
DAkkS 50 Hz	$xx \rightarrow 02$	
DAkkS 60 Hz	$xx \rightarrow 03$	

The MT30 is a light weight and compact Reference Meter for on-site verification and calibration of single- or three-phase domestic meters. The MT30 is designed for testing of one test specimen.

Configuration:

- Direct voltage measurement up to 300 V / -- A *
- Accuracy for power/energy measurement: < ±0.2 % by using of MT3460 current clamp type
- · Power supply via external unit
- Rechargeable battery operation (optional)
- * Current measurements only via current clamps



MT30 Three-Phase Reference Meter CAT IV Inclusive MT3460, adjustment and factory calibration

for <u>one</u> mains frequency.

Calibration	Ord.No.	
Factory 50 Hz	$xx \rightarrow 00$	
Factory 60 Hz	$xx \rightarrow 01$	
DAkkS 50 Hz	$xx \rightarrow 02$	
DAkkS 60 Hz	$xx \rightarrow 03$	

The MT30 is a light weight and compact Reference Meter for on-site verification and calibration of single- or three-phase domestic meters. The MT30 is designed for testing of one test specimen.

Configuration:

- Direct voltage measurement up to 300 V / -- A *
- Accuracy for power/energy measurement: < ±0.2 % by using of MT3460 current clamp type



- Power supply via external unit
- Rechargeable battery operation (optional)
- * Current measurements only via current clamps

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

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.



AC Power Supply for MT10/30 with fuse to operate and recharge internal batteries. Input voltage 90264 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

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	 2.0 m For supply via mains supply. 1x Plug type A 1x Figure-of-eight socket (IEC 60320))-1 C7)	Ord.No.	100277201
9	 Power cord "Euro plug type C to figu 2.0 m For supply via mains supply. 1x Euro plug type C (CEE 7/16) 1x Figure-of-eight socket (IEC 60320) 		Ord.No.	100067700



Power cord "Plug type G to figure-of-eight",		
2.0 m	Ord.No.	100277200
For supply via mains supply.		
 1x Plug type G (BS1363) 		
1x Figure-of-eight socket (IEC 60320-1 C7)		

	For supply via m	ug type I to figure-of-eight", 2.0 m nains supply. I (AS/NZS 3112, 2-pin) eight socket (IEC 60320-1 C7)	Ord.No.	100277202
	to figure-of-eig For supply via te • 2x stackable, insulating sle		Ord.No.	100067608
Battery Pack and	Accessories			
	 3,7 V/2200 m Please remark classified as " Sending Li-lor requires a lot Therefore, ZE part batteries 	a that Li-Ion batteries are Dangerous Good for Shipment". In batteries <u>as spare part</u> by air of strict security procedures. RA can only offer this spare as EXW (Incoterms). r will be responsible ortation.	Ord.No.	100619500
Current Clamps (see also Speci	al Accessories)		
	The CT set is ele independent from	rrent clamp set 120 A ectronically compensated. Calibration n the measuring standard inclusive factory calibration for <u>one</u> mains frequenc	Ord.No.	1016683xx
Calibration	Calibration	Ord.No.		
	Factory 50 Hz	xx → 00		
	Factory 60 Hz	xx → 01		
	DAkkS 50 Hz	$xx \rightarrow 02$		
	DAkkS 60 Hz	$xx \rightarrow 03$		
		ons are only performed together ponding measuring standard.		
	 Clamping diam Output: D-Sub Measuring range 			

• Error of measurement:



1016692xx

100023402

100023483

Ord.No.

Ord.No.

Ord.No.

- < ±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



MT3416, AC current clamp set 300 A

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

Calibration	Ord.No.
Factory 50 Hz	$xx \rightarrow 00$
Factory 60 Hz	$xx \rightarrow 01$
DAkkS 50 Hz	$xx \rightarrow 02$
DAkkS 60 Hz	$xx \rightarrow 03$

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: < ±0,15 % / < 0,1° (1 A ... 300 A) < ±0,3 % / < 0,1° (500 mA ... 1 A)
 - < ±0,6 % / < 0,15° (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



Quick connection cable CAT IV for "voltage/rigid sleeve" for MT series, 2 m, phase colours: red/yellow/blue/black

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

Instrument's side: 1x 4-pin connector with anti-twist safeguard.

	 Mains side: 4x 4 mm Multilam plug with rigid insulating sleeve - 1x red, 1x yellow, 1x blue, 1x black Cable cross-section: 2.5 qmm 		
Current and Volta	ge 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
	 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

100090720

100201900

Ord.No.

Ord.No.

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.

28.02.	2007 10:			IR:	MM:
Selec	tive	2	50 V	C10 A	4WA
СН:	L1				SEL
N			Ar]		
0	0.0000		3000	0.00	
1	2.2409		2800	2.24	
2	-0.0000		0000	0.00	
3	0.0230		0001	0.02	
4	0.0000	-0.1	0000	0.00	
5	0.2004		2002	0.20	
6	0.0000	0.1	0000	0.00	00
2	-0.0000	0.1	0000	0.00	
8	0.0000	-0.	9000	0.00	00
9	0.0000	0.1	0000	0.00	00
10	-0.0000	-0,1	0000	0.00	00
Func.	UR	IR	MH	Star	t Stop

_	Software option for selective power measurement,		
EL	MT10 / MT30	Ord.No.	100078811
aRM H≠	3 additional measuring modes for only fundamental power in 4W active, 4W reactive and 4W apparent are available		

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.



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.

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Holding device for scanning head TK326/ TK118

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

Ord.No. **100319600**

Maximum wingspan: 19.0 cm.

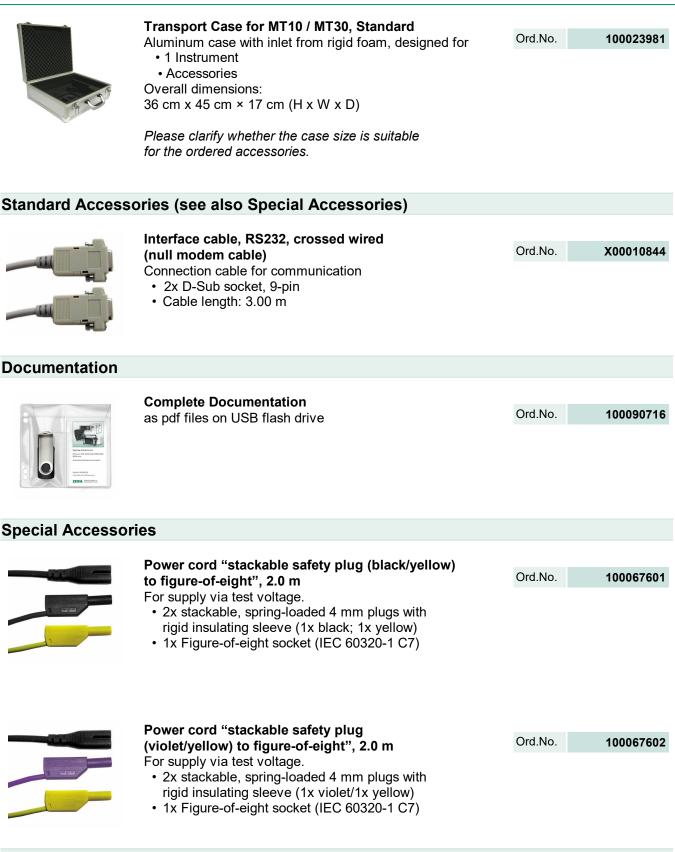


Product Catalog MT30	ZERA		Version from: 01.07.20
प्रदिष्ठि ग्रा • अग्म	K121, S0 pulse converter with measuring leads For pulse detection of floating contacts as well as of S0 pulse output on electricity meters. Including two laboratory cables with safety plug/connection pin.	Ord.No.	100004210
	Connection cable for 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 1x Accessories bag (100214400) 3x Spring clip (100606750) 4x 4 mm plug adapter (banana plug) (X00004962) 4x Adapter for terminal blocks (101584400) 3x 4 mm test clips (crocodile clips), slim (X00009329) 3x 4 mm test clips (crocodile clips), wide (X00010059) 	Ord.No.	100023723
Transport (see al	so Special Accessories)		
THE REAL PROPERTY IN THE REAL PROPERTY INTO THE REAL PR	 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 × 18 cm (H x W x D) 	Ord.No.	100023990

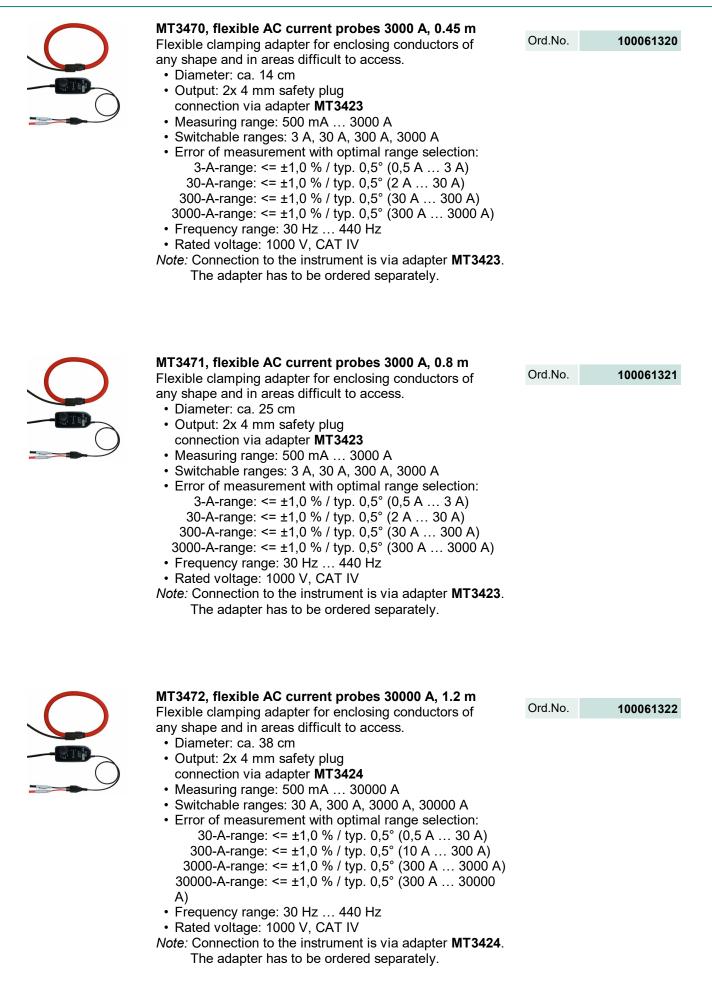
Please clarify whether the case size is suitable for the ordered accessories.

Product Catalog MT30

ZERA



Special Accessories (Current Clamps and Probes)





D-Sub plug 25-pin", 1.0 m.	Ord.No.	1000322
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		



MT3424, adapter "4 mm safety plug to		
D-Sub plug 25-pin", 1.0 m.	Ord.No.	100032221
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.

Ord.No.

100013307

100013306

Special Accessories (Quick Connection Cable)



Quick connection cable "voltage/retractable 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).

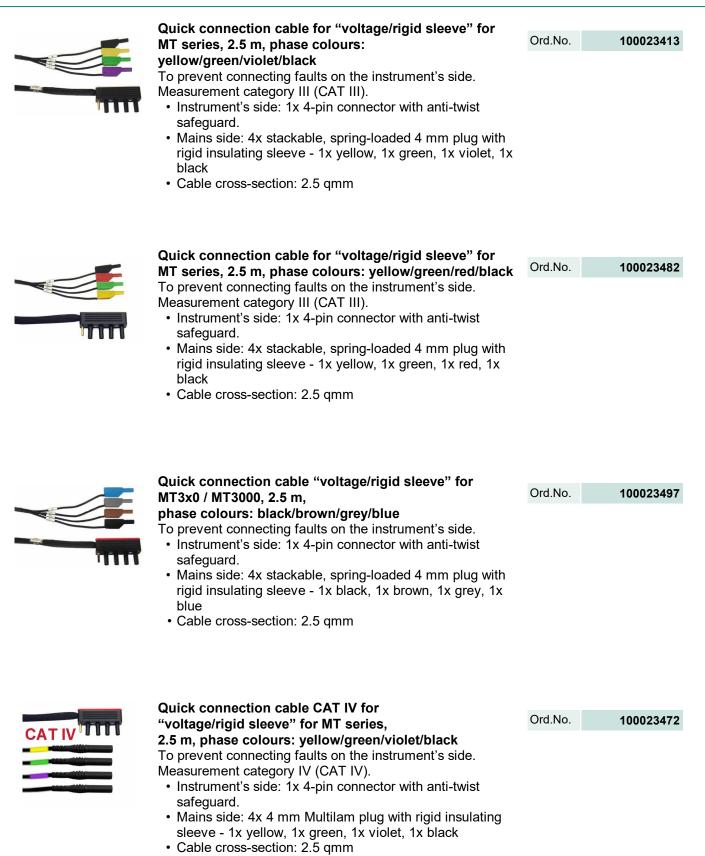
- · Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 4x stackable, spring-loaded 4 mm plug with retractable sleeve to prevent accidental touching - 1x red, 1x yellow, 1x blue, 1x black
- Cable cross-section: 2.5 qmm

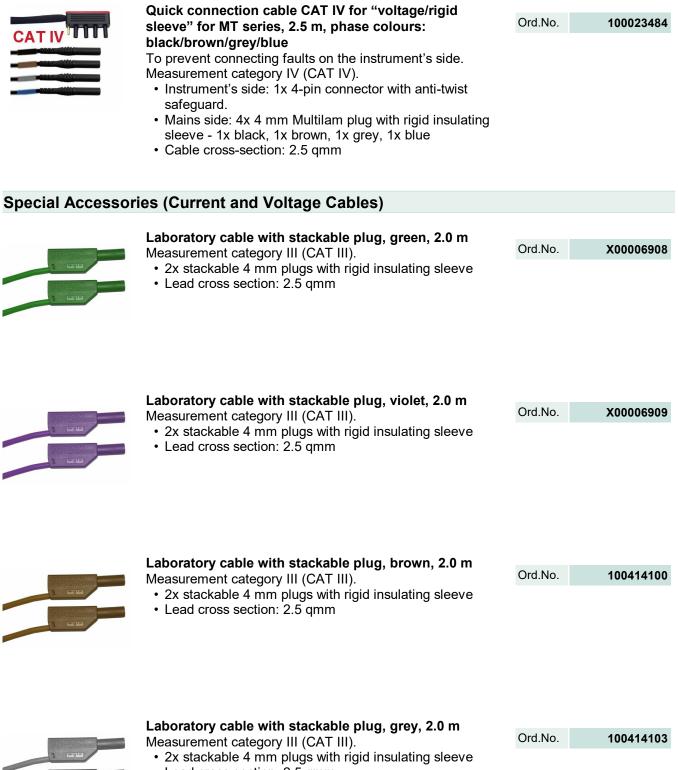


Quick connection cable for "voltage/rigid sleeve" for MT series, 4.0 m, phase colours: red/yellow/blue/black To prevent connecting faults on the instrument's side. Measurement category III (CAT III).

- 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







Lead cross section: 2.5 qmm

Subject to change without notice.

Product Catalog MT30



~	 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 Accessor	ies (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

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Special Accessories (General) Adapter "USB to RS232" (32/64 bit), 1.5 m Ord.No. 101421801 For use with an external PC/Notebook (32/64 bit) with WINDOWS OS (7, 8, 10). MT3450, Temperature sensor Ord.No. 100904000 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 (± 1° C) Resolution: 0,1° C Cable length: 3 m **Readjustment (for Service)** Adjustment of MT30 Ord.No. 100033858 Note: Calibration and Calibration report Adjustment are not included. **Calibration (for Service)** Factory Calibration for MT30, 50 Hz Ord.No. 100007049 incl. ZERA calibration report. **FACTOR** Load points according to ZERA regulations. 50 Hz Summary of used load points can be downloaded at www.zera.de. Additional load points are subject to charges. Factory Calibration for MT30, 60 Hz Ord.No. 100519719 incl. ZERA calibration report. FACTORY Load points according to ZERA regulations. 60 Hz Summary of used load points can be downloaded at www.zera.de. Additional load points are subject to charges.

Product Catalog MT30

ZERA

FACTORY 50 Hz Calibration	 Factory Calibration for MT30 incl. current clamp MT3460, 50 Hz incl. ZERA calibration report. 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. 	Ord.No.	100890851
FACTORY 60 Hz Calibration	 Factory Calibration for MT30 incl. current clamp MT3460, 60 Hz incl. ZERA calibration report. 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. 	Ord.No.	100890852
FACTORY 50 Hz Calibration	 Factory Calibration for MT3460 / MT3465 50Hz incl. ZERA calibration report. 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. 	Ord.No.	101242304
FACTORY 60 Hz Calibration	 Factory Calibration for MT3460 / MT3465 60Hz incl. ZERA calibration report. 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. 	Ord.No.	101242305
FACTORY 50 Hz Calibration	Factory Calibration for MT3416 / MT3417, 50 Hz incl. ZERA calibration report. Load points according to ZERA regulations. Summary of used load points can be downloaded at www.zera.de	Ord.No.	100519701

Additional load points are subject to charges.

can be downloaded at www.zera.de.

	Factory Calibration for MT3416 / MT3417, 60 Hz incl. ZERA calibration report.	Ord.No.	100519704
FACTORY 60 Hz Calibration	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	Ord.No.	100007093
FACTORY Calibration	load point for power and energy		
FACTORY Calibration	Factory Calibration for instrument, each additional load point for current and/or voltage	Ord.No.	100007094
FACTORY Calibration	Factory Calibration for current clamps, each additional load point for for power and energy	Ord.No.	100007092
	DAkkS DKD-Calibration for MT30, 50 Hz incl. DKD-Calibration Certificate acc. IEC 17025	Ord.No.	100006849
DAkkS 50 Hz Calibration	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.		

Product Catalog MT30

ZERA



Additional load points are subject to charges.

DAkkS 50 Hz Calibration	 DAkkS DKD-Calibration for MT3416 / MT3417, 50 Hz Incl. DKD-Calibration Certificate acc. IEC 17025 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. 	Ord.No.	100519600
DAkkS 60 Hz Calibration	 DAkkS DKD-Calibration for MT3416 / MT3417, 60 Hz incl. DKD-Calibration Certificate acc. IEC 17025 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. 	Ord.No.	100519603
DAkkS Calibration	DAkkS DKD-Calibration (acc. IEC 17025) for instrument, each additional load point for power and energy	Ord.No.	100006893
DAkkS Calibration	DAkkS DKD-Calibration (acc. IEC 17025) for instrument, each additional load point for current / voltage	Ord.No.	100006894
DAkkS Calibration	DAkkS DKD-Calibration (acc. IEC 17025) for current clamps, each additional load point for power and energy	Ord.No.	100006892



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Commerzbank Bonn IBAN: DE29 3804 0007 0113 3131 00 SWIFT (BIC): COBADEFF380

Kreissparkasse Köln IBAN: DE15 3705 0299 0001 0784 92 SWIFT (BIC): COKSDE33

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

Notes on using the product catalogue

When ordering, always state the order number.

Pictures can differ from original product.

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