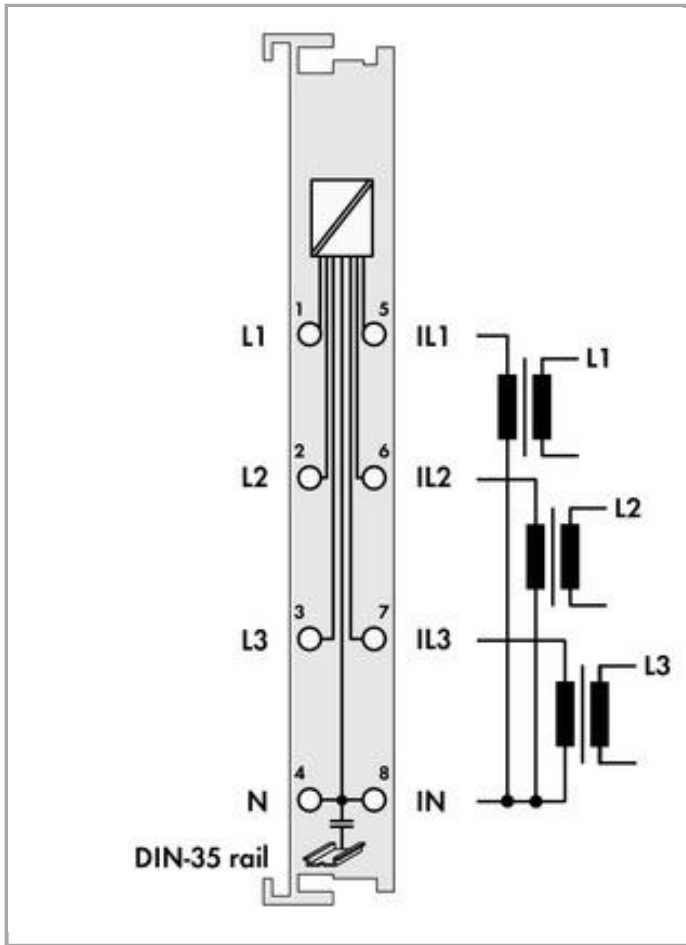


RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)

Color:



Item description

The 750-494 3-Phase Power Measurement Module measures electrical data in a three-phase supply network. The voltage is measured via network connection to L1, L2, L3 and N. The current of the three phases is fed to IL1, IL2, IL3 and IN via current transformers. The 750-494 Module transmits metrics (e.g., reactive/apparent/effective power, energy consumption, power factor, phase angle, frequency, over-/undervoltage) directly into the process image, without requiring high computing power from the controller. Both comprehensive metrics and harmonic analysis up to the 41st harmonic permit an extensive network analysis via the fieldbus.

Metrics allow the operator to optimize the supply to a drive or machine, protecting the system from damage and failure. The 4-quadrant display indicates the type of load (inductive, capacitive) and whether it is an energy consumer or producer.

Data

Technical Data

Number of measurement inputs	6 (3 voltage measurement inputs, 3 current measurement inputs)
Type of signal	Power measurement
Signal form	any (taking the maximum frequency into account)
Resolution [bit]	24 Bit
Bit width	2 x 128-bit data; 2 x 64-bit control/status
Input resistance voltage path (typ.)	1072 k Ω
Eingangswiderstand Strompfad typ.	5m Ω



Reference for measurement error	AC Strom/Spannung
Measurement error, reference temperature	25 °C
Measurement error, deviation max. from the upper-range value	0.5 %
Measuring current (max.)	5 A
Measuring cycle time	Adjustable for arithmetic mean value, Min_Max_Values
Operating frequency	15.9 kHz
Frequency range, power supply frequency	45 ... 65 Hz
Frequency range, harmonics analysis	0 ... 3300 Hz
Measurement components	Evaluating
Rated voltage	$V_{LN} = 277 \text{ V AC/DC}$; $V_{LL} = 480 \text{ V AC}$
Measured values	Line-to-line voltage, power output, energy, power factors, mains frequency, harmonic analysis (up to the 41st harmonic), THD
Measuring procedure	True RMS measurement
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	100 mA
Isolation	4 kV System/Feld
Rated surge voltage	4 kV

Connection data

Connection technology: inputs/outputs	8 x CAGE CLAMP®
Connection type (1)	Inputs/Outputs
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 Inch

Geometrical Data

Width	12 mm / 0.472 inch
Height	67.8 mm / 2.669 inch
Height from upper-edge of DIN-35 rail	60.6 mm / 2.386 inch
Depth	100 mm / 3.937 inch

Mechanical data

Type of mounting	DIN-35 rail
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Material Data

Color	light gray
Housing material	Polycarbonate, polyamide 6.6
Weight	48.228 g
Conformity marking	CE

Environmental Requirements

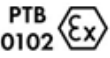


Surrounding air (operating) temperature	0 ... 55 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Degree of protection	IP20
Degree of pollution (5)	2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying) or vertical
Relative air humidity (no condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-3
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity < 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity < 75 %	25 ppm

Commercial data

Country of origin	DE
GTIN	4050821548249
Customs Tariff No.	85389099990
Product Group	15 (Remote I/O)

Approvals / Certificates

Ex-Approvals

Logo	Approval	Certificate name
	ATEX TUEV Nord Cert GmbH	TÜV 07 ATEX 554086 X en.
	TUEV Nord TUEV Nord Cert GmbH	IECEx TUN 09.0001 X
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	E198726 Sec.1 (HAZARDOUS LOCATIONS)

Country specific Approvals



Logo	Approval	Certificate name
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KC
National Radio Research Agency

MSIP-REM-W43-AIM750

Ship Approvals







Logo	Approval	Certificate name
	DNV GL Det Norske Veritas, Germanischer Lloyd	TAA00000Y7
	PRS Polski Rejestr Statków	TE/2210/880590/18
















UL-Approvals







Logo	Approval	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	E175199 Sec.1 (ORDINARY LOCATIONS)

Compatible products









current transformer

	Item no.: 855-1005/2500-1001 Plug-in current transformer; Primary rated current: 2500 A; Secondary rated current: 5 A; Rated power: 10 VA; Accuracy class: 1	www.wago.com/855-1005/2500-1001
	Item no.: 855-305/050-103 Plug-in current transformer; Primary rated current: 50 A; Secondary rated current: 5 A; Rated power: 1.25 VA; Accuracy class: 3	www.wago.com/855-305/050-103
	Item no.: 855-305/060-101 Plug-in current transformer; Primary rated current: 60 A; Secondary rated current: 5 A; Rated power: 1.25 VA; Accuracy class: 1	www.wago.com/855-305/060-101
	Item no.: 855-305/075-201 Plug-in current transformer; Primary rated current: 75 A; Secondary rated current: 5 A; Rated power: 2.5 VA; Accuracy class: 1	www.wago.com/855-305/075-201
	Item no.: 855-305/100-201 Plug-in current transformer; Primary rated current: 100 A; Secondary rated current: 5 A; Rated power: 2.5 VA; Accuracy class: 1	www.wago.com/855-305/100-201
	Item no.: 855-305/150-501 Plug-in current transformer; Primary rated current: 150 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1	www.wago.com/855-305/150-501
	Item no.: 855-305/200-501	

	Plug-in current transformer; Primary rated current: 200 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1	www.wago.com/855-305/200-501
	Item no.: 855-305/250-501 Plug-in current transformer; Primary rated current: 250 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1	www.wago.com/855-305/250-501
	Item no.: 855-305/300-501 Plug-in current transformer; Primary rated current 300 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1	www.wago.com/855-305/300-501
	Item no.: 855-305/400-1001 Plug-in current transformer; Primary rated current: 400 A; Secondary rated current: 5 A; Rated power: 10 VA; Accuracy class: 1	www.wago.com/855-305/400-1001
	Item no.: 855-305/600-1001 Plug-in current transformer; Primary rated current: 600 A; Secondary rated current: 5 A; Rated power: 10 VA; Accuracy class: 1	www.wago.com/855-305/600-1001
	Item no.: 855-4005/150-101 Split-core current transformer; Primary rated current: 150 A; Secondary rated current: 5 A; Rated power: 1 VA; Accuracy class: 1; Cable length: 0.5 m	www.wago.com/855-4005/150-101
	Item no.: 855-405/250-501 Plug-in current transformer; Primary rated current: 250 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1	www.wago.com/855-405/250-501
	Item no.: 855-405/400-501 Plug-in current transformer; Primary rated current: 400 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1	www.wago.com/855-405/400-501
	Item no.: 855-405/750-501 Plug-in current transformer; Primary rated current 750 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1	www.wago.com/855-405/750-501
	Item no.: 855-4105/250-101 Split-core current transformer; Primary rated current: 250 A; Secondary rated current: 5 A; Rated power: 1 VA; Accuracy class: 1; Cable length: 0.5 m	www.wago.com/855-4105/250-101
	Item no.: 855-4105/400-101 Split-core current transformer; Primary rated current: 400 A; Secondary rated current: 5 A; Rated power: 1 VA; Accuracy class: 1; Cable length: 0.5 m	www.wago.com/855-4105/400-101
	Item no.: 855-5005/1000-000 Split-core current transformer; Primary rated current: 1000 A; Secondary rated current: 5 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 3 m	www.wago.com/855-5005/1000-000
	Item no.: 855-5005/400-001 Split-core current transformer; Primary rated current: 400 A; Secondary rated current: 5 A; Rated power: 0.5 VA; Accuracy class: 1; Cable length: 3 m	www.wago.com/855-5005/400-001
	Item no.: 855-5005/600-000 Split-core current transformer; Primary rated current: 600 A; Secondary rated current: 5 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 3 m	www.wago.com/855-5005/600-000
	Item no.: 855-505/1000-1001 Plug-in current transformer; Primary rated current: 1000 A; Secondary rated current: 5 A; Rated power: 10 VA; Accuracy class: 1	www.wago.com/855-505/1000-1001

	Item no.: 855-505/400-1001 Plug-in current transformer; Primary rated current: 400 A; Secondary rated current: 5 A; Rated power: 10 VA; Accuracy class: 1	www.wago.com/855-505/400-1001
	Item no.: 855-505/600-1001 Plug-in current transformer; Primary rated current: 600 A; Secondary rated current: 5 A; Rated power: 10 VA; Accuracy class: 1	www.wago.com/855-505/600-1001
	Item no.: 855-505/800-1001 Plug-in current transformer; Primary rated current: 800 A; Secondary rated current: 5 A; Rated power: 10 VA; Accuracy class: 1	www.wago.com/855-505/800-1001
	Item no.: 855-5105/1000-000 Split-core current transformer; Primary rated current: 1000 A; Secondary rated current: 5 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 3 m	www.wago.com/855-5105/1000-000
	Item no.: 855-605/1500-501 Plug-in current transformer; Primary rated current: 1500 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1	www.wago.com/855-605/1500-501
	Item no.: 855-805/2000-1001 Plug-in current transformer; Primary rated current: 2000 A; Secondary rated current: 5 A; Rated power: 10 VA; Accuracy class: 1	www.wago.com/855-805/2000-1001

Marking accessories

	Item no.: 2009-145 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145
	Item no.: 2009-145/000-002 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-002
	Item no.: 2009-145/000-005 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-005
	Item no.: 2009-145/000-006 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-006
	Item no.: 2009-145/000-007 Mini-WSB Inline; plain; 1,700 Mini-WSB markers (5 mm) on roll; stretchable 5 - 5.2 mm	www.wago.com/2009-145/000-007
	Item no.: 2009-145/000-012 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-012
	Item no.: 2009-145/000-023 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-023
	Item no.: 2009-145/000-024 Mini-WSB Inline; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-024



Item no.: 248-501

Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card

www.wago.com/248-501



Item no.: 248-501/000-002

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-002



Item no.: 248-501/000-005

Mini-WSB marking card; as card; plain; snap-on type

www.wago.com/248-501/000-005



Item no.: 248-501/000-006

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-006



Item no.: 248-501/000-007

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-007



Item no.: 248-501/000-012

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-012



Item no.: 248-501/000-017

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-017



Item no.: 248-501/000-023

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-023



Item no.: 248-501/000-024

Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-024



Item no.: 750-103

Group marker carrier

www.wago.com/750-103

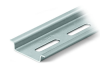


Item no.: 750-107

Group marker carrier

www.wago.com/750-107

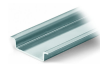
Carrier rail



Item no.: 210-112

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm

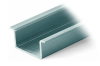
www.wago.com/210-112



Item no.: 210-113

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715

www.wago.com/210-113



Item no.: 210-114

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

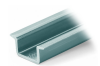
www.wago.com/210-114



Item no.: 210-115

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm








www.wago.com/210-115










Item no.: 210-118

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715





www.wago.com/210-118














	Item no.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715	www.wago.com/210-196
	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	www.wago.com/210-197
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	www.wago.com/210-198
	Item no.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	www.wago.com/210-504
	Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715	www.wago.com/210-505
	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	www.wago.com/210-506
	Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715	www.wago.com/210-508

shield connection




	Item no.: 790-108 Shield clamping saddle; 11 mm wide; diameter of compatible conductor	www.wago.com/790-108
	Item no.: 790-116 Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm	www.wago.com/790-116
	Item no.: 790-124 Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 mm to 24 mm	www.wago.com/790-124
	Item no.: 790-140 Shield clamping saddle; 43 mm wide; diameter of compatible conductor; 22 mm to 40 mm	www.wago.com/790-140
	Item no.: 790-208 Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm	www.wago.com/790-208
	Item no.: 790-216 Shield clamping saddle; 6–16 mm diameter; 21.8 mm wide	www.wago.com/790-216
	Item no.: 790-220 Shield clamping saddle; 30 mm wide; 6 ... 20 mm	www.wago.com/790-220

system box




	Item no.: 850-804 IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip	www.wago.com/850-804
	Item no.: 850-804/000-001 IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip	www.wago.com/850-804/000-001
	Item no.: 850-805 IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip	www.wago.com/850-805
	Item no.: 850-814/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate	www.wago.com/850-814/002-000

	Item no.: 850-815/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate	www.wago.com/850-815/002-000
	Item no.: 850-816/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate	www.wago.com/850-816/002-000
	Item no.: 850-817/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate	www.wago.com/850-817/002-000
	Item no.: 850-825 IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20	www.wago.com/850-825
	Item no.: 850-826 IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-826
	Item no.: 850-826/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-826/002-000
	Item no.: 850-827 IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-827
	Item no.: 850-827/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-827/002-000
	Item no.: 850-828 IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	www.wago.com/850-828
	Item no.: 850-828/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	www.wago.com/850-828/002-000
	Item no.: 850-834 IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20	www.wago.com/850-834
	Item no.: 850-835 IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-835
	Item no.: 850-836 IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-836

General accessories

	Item no.: 2007-8873 Compact terminal block; for current and voltage transformers	www.wago.com/2007-8873
	Item no.: 2007-8875 Compact terminal block; for current transformer circuit	www.wago.com/2007-8875
	Item no.: 855-8001 Power tap; with fuse; 2,5 mm ² (12 AWG) - 6 mm ² (10 AWG); Phase	www.wago.com/855-8001



	Item no.: 855-8002 Power tap; without fuse; 2,5 mm ² (12 AWG) - 6 mm ² (10 AWG); N-conductor	www.wago.com/855-8002
	Item no.: 855-8003 Power tap; with fuse; 10 mm ² (8 AWG) - 16 mm ² (6 AWG); Phase	www.wago.com/855-8003
	Item no.: 855-8004 Power tap; without fuse; 10 mm ² (8 AWG) - 16 mm ² (6 AWG); N-conductor	www.wago.com/855-8004

Downloads Documentation

Manual			
3-Phase Power Measurement Module 480 V	Jun 9, 2017	4.8 MB	Download
Bid Text			
750-494/000-001 IO-Klemmen	Jan 20, 2016	DOC 32.3 kB	Download
Additional Information			
Disposal; Electrical and electronic equipment, Packaging	Oct 15, 2018	265.8 kB	Download
System Description			
Overview on WAGO-I/O-SYSTEM 750 approvals	Jun 6, 2017	314.9 kB	Download
750/753 Series I/O-System – General Product Information	May 29, 2018	2.0 MB	Download

Product family

750/753 Series I/O-System
[Learn more about the product family.](#)

[Show all products from the family](#)

Subject to changes.

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 We are always happy to take your call at +49 (571) 887-44222.