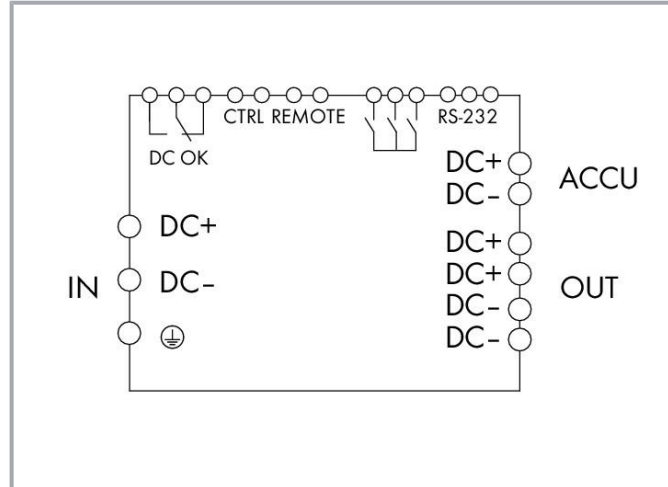


Data sheet | Item number: 787-875

UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage;  
20 A output current; LineMonitor; communication capability; 10,00 mm<sup>2</sup>



[www.wago.com/787-875](http://www.wago.com/787-875)



Subject to changes. Please also observe the further product documentation!

WAGO Kontakttechnik GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



## Item description

### Features:

- Charger and controller for uninterruptible power supply (UPS)
- Current and voltage monitoring, as well as parameter setting via LCD and RS-232 interface
- Active signal outputs for function monitoring
- Remote input for buffered output deactivation
- Input for temperature control of connected battery
- Battery control (from manufacturing no. 215563) detects both battery life and battery type

Subject to changes. Please also observe the further product documentation!



## Data

### Technical data

Nominal input voltage $U_{i \text{ nom}}$	DC 24 V
Input voltage range	DC 22 ... 29 V
Nominal mains frequency range	0 Hz
Input current $I_i$	$\leq 0.1 \text{ A}$ (No load); $\leq 1.5 \text{ A}$ (Charging); $\leq 21.5 \text{ A}$
Inrush current	$\leq 4 \text{ A}$ (no load)
Power loss $P_i$	$\leq 15 \text{ W}$ (no load); $\leq 30 \text{ W}$ (nominal load)
Efficiency (typ.)	95 %
Nominal output voltage $U_{o \text{ nom}}$	DC 24 V
Output voltage range	$U_i - 1 \text{ VDC}$ (rated operation); 20 ... 25.5 VDC (buffer mode)
Nominal output current $I_{o \text{ nom}}$	20 A
Current limitation	$1.1 \dots 1.3 \times I_{o \text{ nom}}$ (typ.)
Isolation voltage (connectors – housing)	DC 0.5 kV
Protection class	III
Protection type	IP20 (per EN 60529)
Reverse voltage protection	yes
Resistance to reverse feed	$\leq \text{DC } 35 \text{ V}$
Pollution degree	2
Parallel operation	Yes, max. 3 battery modules for buffer time extension (temperature measurement evaluation is only possible via one battery module)
Series operation	No
MTBF	> 500,000 h (per IEC 61709)
Internal fuse	T 25 A
Buffer time	10 s ... 10 min or constant; adjustable
Switch-on threshold (adjustable)	DC 20 ... 25.5 V
Charging current	$\leq 1 \text{ A}$
End-of-charge voltage	DC 26 ... 29.5 V (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873
Signaling	1 x LED DC OK (green) 1 x Warning LED (yellow) 1 x Error LED (red) LCD 3 x Signal output (24 VDC; max. 25 mA) 1 x Isolated relay contact (max. 30 VDC; 1 A)

Subject to changes. Please also observe the further product documentation!



	1 x RS-232 interface Battery control (C+; C-)
Operation status indicator	Green LED (U <sub>o</sub> ) Yellow LED (warning) Red LED (error)
Communication	RS-232 serial interface
Remote input	Switching buffer mode off

### Connection data

Connection type (1)	Input/Output
Connection technology	Push-in CAGE CLAMP®
WAGO Connector	WAGO 831 Series
Solid conductor	0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG
Fine-stranded conductor	0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG
Strip length	13 ... 15 mm / 0.51 ... 0.59 inch
Connection type 2	Signaling
Connection technology 2	CAGE CLAMP®
WAGO Connector 2	WAGO 2616 Series
Solid conductor 2	0.08 ... 0.5 mm <sup>2</sup> / 28 ... 20 AWG
Fine-stranded conductor 2	0.08 ... 0.5 mm <sup>2</sup> / 28 ... 20 AWG
Strip length 2	5 ... 6 mm / 0.2 ... 0.24 inch
Line length (max.)	3 m (Input, Output, Battery Control)

### Physical data

Width	57 mm / 2.244 inch
Height	171 mm / 6.732 inch
Depth from upper edge of DIN-rail	163 mm / 6.417 inch
Note (dimensions)	Height with connector

### Mechanical data

Mounting type	DIN-35 rail
---------------	-------------

### Material data

Fire load	0.497 MJ
Weight	1200 g

Subject to changes. Please also observe the further product documentation!

## Environmental requirements

Surrounding air temperature (operation)	-10 ... 60 °C
Surrounding air temperature (storage)	-25 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)

## Standards and specifications



Conformity marking	CE
Standards/Specifications	EN 60950 UL 60950 UL 508 EN 61000-6-2 EN 61000-6-3

## Commercial data

Product Group	6 (Interface Electronics)
PU (SPU)	1 Stück
Packaging type	box
Country of origin	DE
GTIN	4045454993917
Customs tariff number	85049017000

## Approvals / Certificates

### UL-Approvals














Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 60950-1	E255815
	UL Underwriters Laboratories Inc.	UL 508	E255817

## Optional accessories

### Marking accessories

Marking strip
---------------











Subject to changes. Please also observe the further product documentation!

	<b>Item no.: 2009-110</b> Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white	<a href="http://www.wago.com/2009-110">www.wago.com/2009-110</a>
<b>Marker</b>		
	<b>Item no.: 2009-145</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>
	<b>Item no.: 2009-115</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/2009-115">www.wago.com/2009-115</a>
	<b>Item no.: 248-501</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white	<a href="http://www.wago.com/248-501">www.wago.com/248-501</a>
	<b>Item no.: 793-501</b> WMB marking card; as card; not stretchable; plain; snap-on type; white	<a href="http://www.wago.com/793-501">www.wago.com/793-501</a>
	<b>Item no.: 793-5501</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/793-5501">www.wago.com/793-5501</a>
<b>Tool</b>		
Operating tool		
	<b>Item no.: 210-719</b> Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	<a href="http://www.wago.com/210-719">www.wago.com/210-719</a>
	<b>Item no.: 210-721</b> Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured	<a href="http://www.wago.com/210-721">www.wago.com/210-721</a>
<b>Cables and pluggable connectors</b>		
Communication cable		
	<b>Item no.: 787-890</b> RS-232 communication cable; Length 1.8 m	<a href="http://www.wago.com/787-890">www.wago.com/787-890</a>
Connection cable		
	<b>Item no.: 761-9005</b> USB adapter; with 1m connection cable	<a href="http://www.wago.com/761-9005">www.wago.com/761-9005</a>
<b>Ferrule</b>		
Ferrule		
	<b>Item no.: 216-203</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="http://www.wago.com/216-203">www.wago.com/216-203</a>
	<b>Item no.: 216-206</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; blue	<a href="http://www.wago.com/216-206">www.wago.com/216-206</a>
	<b>Item no.: 216-207</b> Ferrule; Sleeve for 4 mm <sup>2</sup> / AWG 12; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-207">www.wago.com/216-207</a>

Subject to changes. Please also observe the further product documentation!

	<b>Item no.: 216-202</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-202">www.wago.com/216-202</a>
	<b>Item no.: 216-204</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="http://www.wago.com/216-204">www.wago.com/216-204</a>
	<b>Item no.: 216-205</b> Ferrule; Sleeve for 2.08 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-205">www.wago.com/216-205</a>
	<b>Item no.: 216-208</b> Ferrule; Sleeve for 6 mm <sup>2</sup> / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	<a href="http://www.wago.com/216-208">www.wago.com/216-208</a>
	<b>Item no.: 216-201</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="http://www.wago.com/216-201">www.wago.com/216-201</a>
	<b>Item no.: 216-223</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="http://www.wago.com/216-223">www.wago.com/216-223</a>
	<b>Item no.: 216-241</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	<a href="http://www.wago.com/216-241">www.wago.com/216-241</a>
	<b>Item no.: 216-242</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	<a href="http://www.wago.com/216-242">www.wago.com/216-242</a>
	<b>Item no.: 216-222</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-222">www.wago.com/216-222</a>
	<b>Item no.: 216-221</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="http://www.wago.com/216-221">www.wago.com/216-221</a>
	<b>Item no.: 216-224</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="http://www.wago.com/216-224">www.wago.com/216-224</a>
	<b>Item no.: 216-243</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	<a href="http://www.wago.com/216-243">www.wago.com/216-243</a>
	<b>Item no.: 216-244</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	<a href="http://www.wago.com/216-244">www.wago.com/216-244</a>
	<b>Item no.: 216-263</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	<a href="http://www.wago.com/216-263">www.wago.com/216-263</a>
	<b>Item no.: 216-246</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-246">www.wago.com/216-246</a>
	<b>Item no.: 216-266</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-266">www.wago.com/216-266</a>
	<b>Item no.: 216-264</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	<a href="http://www.wago.com/216-264">www.wago.com/216-264</a>

Subject to changes. Please also observe the further product documentation!

	<b>Item no.: 216-284</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	<a href="http://www.wago.com/216-284">www.wago.com/216-284</a>
	<b>Item no.: 216-286</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-286">www.wago.com/216-286</a>
	<b>Item no.: 216-287</b> Ferrule; Sleeve for 4 mm <sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	<a href="http://www.wago.com/216-287">www.wago.com/216-287</a>
	<b>Item no.: 216-262</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	<a href="http://www.wago.com/216-262">www.wago.com/216-262</a>
	<b>Item no.: 216-288</b> Ferrule; Sleeve for 6 mm <sup>2</sup> / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	<a href="http://www.wago.com/216-288">www.wago.com/216-288</a>
	<b>Item no.: 216-301</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-301">www.wago.com/216-301</a>
	<b>Item no.: 216-321</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-321">www.wago.com/216-321</a>
	<b>Item no.: 216-322</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-322">www.wago.com/216-322</a>
	<b>Item no.: 216-267</b> Ferrule; Sleeve for 4 mm <sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	<a href="http://www.wago.com/216-267">www.wago.com/216-267</a>
	<b>Item no.: 216-302</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-302">www.wago.com/216-302</a>

**Mounting adapter**

Wall-mount adapter



<b>Item no.: 787-895</b> Mounting carrier; for screw fixing of 787-8xx devices on mounting plate or wall without DIN 35 rail	<a href="http://www.wago.com/787-895">www.wago.com/787-895</a>
---	--

DIN-rail adapter



<b>Item no.: 787-897</b> Carrier rail adapter made of zinc die-cast; for mounting 787-8xx devices to a DIN 35 rail	<a href="http://www.wago.com/787-897">www.wago.com/787-897</a>
---	--



<b>Item no.: 787-896</b> Carrier rail adapter; for mounting 787-8xx devices to a DIN 35 rail	<a href="http://www.wago.com/787-896">www.wago.com/787-896</a>
---	--

**Power supplies**

Uninterruptible power supply



<b>Item no.: 787-871</b> Lead-acid AGM battery module; 24 VDC input voltage; 20 A output current; 3.2 Ah capacity; with battery control; 2,50 mm <sup>2</sup>	<a href="http://www.wago.com/787-871">www.wago.com/787-871</a>
--	--



<b>Item no.: 787-873</b> Lead-acid AGM battery module; 24 VDC input voltage; 40 A output current; 12 Ah capacity; with battery control	<a href="http://www.wago.com/787-873">www.wago.com/787-873</a>
---	--

Subject to changes. Please also observe the further product documentation!



control; 10,00 mm<sup>2</sup>**Item no.: 787-872**Lead-acid AGM battery module; 24 VDC input voltage; 40 A output current; 7 Ah capacity; with battery control; 10,00 mm<sup>2</sup> [www.wago.com/787-872](http://www.wago.com/787-872)

## Downloads

### Documentation

#### Quick-Start Guide

Quickstart for Software 759-870 Configuration of the USV Control Units 787-870, 787-875 and 787-1675	V 1.0.0	pdf 3.1 MB	Download
---	---------	---------------	----------

#### Bid Text

787-875 docx - Datei	2019. 7. 12.	docx 23.8 kB	Download
-------------------------	--------------	-----------------	----------

787-875 X81 - Datei	2019. 7. 12.	xml 8.0 kB	Download
------------------------	--------------	---------------	----------

#### Instruction Leaflet

Uninterruptible power supply DC 24 V, 20 A	2020. 4. 27.	pdf 1.3 MB	Download
---	--------------	---------------	----------

#### Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
--	---------	-----------------	----------

## Libraries

### Library

Anbindung Stromversorgungen Serie 787 Die Bibliothek "WagoLib787_01.lib" stellt Funktionsbausteine und Visualisierungen zur Verfügung, mit deren Hilfe die Informationen der WAGO Stromversorgungsmodule der Serie 787 angezeigt werden können.	1.3.0 2014. 5. 14.	zip 562.7 kB	Download
--	-----------------------	-----------------	----------

## Engineering-Software

### Software for Interface-Products

WAGO Software 759-870

Subject to changes. Please also observe the further product documentation!

WAGO Kontakttechnik GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



Software 759-870 V2, for configuration and visualization of UPS control units 787-870, 787-875 and combined UPS unit 787-1675	4.12 2021. 5. 10.	zip 38.4 MB	Download
---	----------------------	----------------	----------

#### Configuration and Commissioning Software

WAGO UPS Shutdown Tool	1.0.2	zip	Download
UPS V Shutdown Tool, for automatic shutdown of Windows PCs via UPS	2010. 6. 1.	853.7 kB	

#### CAD/CAE-Data

##### CAD data

2D/3D Models 787-875		URL	Download
----------------------	--	-----	----------

##### CAE data

ZUKEN Portal 787-875		URL	Download
----------------------	--	-----	----------

WSCAD Universe 787-875		URL	Download
------------------------	--	-----	----------

EPLAN Data Portal 787-875		URL	Download
---------------------------	--	-----	----------

#### Environmental Product Compliance

##### Compliance Search

Environmental Product Compliance 787-875		URL	Download
--	--	-----	----------

UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage; 20 A output current; LineMonitor; communication capability; 10,00 mm<sup>2</sup>

#### Installation Notes

Subject to changes. Please also observe the further product documentation!