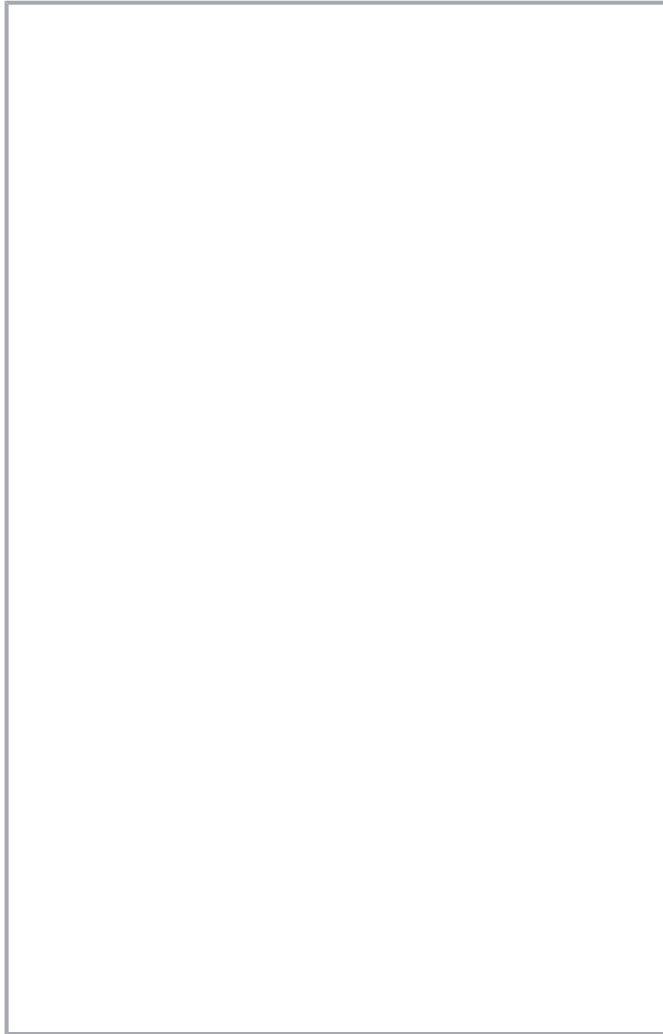


## Data sheet | Item number: 787-870

UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage;  
10 A output current; LineMonitor; communication capability; 2,50 mm<sup>2</sup>



[www.wago.com/787-870](http://www.wago.com/787-870)



### 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 deactivating the buffered output

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

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- Input for temperature control of connected battery
- Battery control (from manufacturing no. 215563 onwards) detects both battery life and battery type

## Data

### Technical data

#### Input

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 $I_i$	$\leq 0.1$ A (No load); $\leq 0.8$ A (Charging); $\leq 10.8$ A
Inrush current	$\leq 4$ A (no load)

#### Output

Nominal output voltage $U_{o\text{ nom}}$	DC 24 V
Output voltage range	$U_i - 1$ VDC (rated operation); 20 ... 25.5 VDC (buffer mode)
Nominal output current $I_{o\text{ nom}}$	10 A
Current limitation	1.1 ... 1.4 x $I_{o\text{ nom}}$ (typ.)

#### Energy storage systems

Buffer time	10 s ... 10 min or constant; adjustable
Switch-on threshold (adjustable)	DC 20 ... 25.5 V
Charging current	$\leq 0.6$ A
End-of-charge voltage	DC 26 ... 29.5 V (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873, 787-876, 787-1671

#### Signaling and Communication

Signaling	1 x LED DC OK (green) 1 x Warning LED (yellow) 1 x Error LED (red) LCD 1 x RS-232 interface
Operation status indicator	Green LED ( $U_o$ ) Yellow LED (warning) Red LED (error)

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



Communication	RS-232 serial interface
Remote input	Switching buffer mode off

### Efficiency/power losses

Power loss $P_I$	$\leq 15 \text{ W}; \leq 20 \text{ W}$ (nominal load)
Efficiency (typ.)	95 %

### Circuit protection

Internal fuse	T 15 A
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### Safety and protection

Protection class	III
Protection type	IP20; per EN 60529
Reverse voltage protection	yes
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)

### Connection data

Connection type 1	Input/Output
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 231 Series
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Connection type 2	Signaling
Connection technology 2	CAGE CLAMP®
WAGO connector 2	WAGO 733 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 inches
Cable length (max.)	3 m (Input, Output, Battery Control)

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



## Physical data

Width	40 mm / 1.575 inches
Height	163 mm / 6.417 inches
Depth from upper-edge of DIN-rail	163 mm / 6.417 inches
Note (dimensions)	Height with connector

## Mechanical Data

Mounting type	DIN-35 rail
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## Material Data

Weight	800 g
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## Environmental requirements

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

## Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61010-1 EN 61010-2-201 UL 60950 UL 508 EN 61000-6-2 EN 61000-6-3

## Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-04-06-90
eCl@ss 9.0	27-04-06-90
ETIM 8.0	EC000382
ETIM 7.0	EC000382
Recupel Type	
PU (SPU)	1 pcs
Packaging type	box
Country of origin	DE

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



GTIN	4045454909857
Customs tariff number	85044060900

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>EAC</b> Brjansker Zertifizierungsstelle	TP TC 020/2011	RU_C-DE. AM02.B. 00093-19
	<b>UL</b> Underwriters Laboratories Inc.	UL 508	E255817
	<b>UL</b> Underwriters Laboratories Inc.	UL 60950-1	E255815

### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-
	<b>UK-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-

## Optional accessories

### Cables and pluggable connectors

#### 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>
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#### Connecting 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>
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### 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>
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#### DIN-rail adapter

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

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**Item no.: 787-897**

Carrier rail adapter made of zinc die-cast; for mounting 787-8xx devices to a DIN 35 rail

[www.wago.com/787-897](http://www.wago.com/787-897)**Item no.: 787-896**

Carrier rail adapter; for mounting 787-8xx devices to a DIN 35 rail

[www.wago.com/787-896](http://www.wago.com/787-896)**Marking accessories**

## Marking strip

**Item no.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

[www.wago.com/2009-110](http://www.wago.com/2009-110)**Item no.: 210-831**

Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

[www.wago.com/210-831](http://www.wago.com/210-831)**Item no.: 210-832**

Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

[www.wago.com/210-832](http://www.wago.com/210-832)**Power supplies**

## Uninterruptible power supply

**Item no.: 787-871**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>[www.wago.com/787-871](http://www.wago.com/787-871)**Item no.: 787-873**Lead-acid AGM battery module; 24 VDC input voltage; 40 A output current; 12 Ah capacity; with battery control; 10,00 mm<sup>2</sup>[www.wago.com/787-873](http://www.wago.com/787-873)**Item no.: 787-876**

Lead-acid AGM battery module; 24 VDC input voltage; 7.5 A output current; 1.2 Ah capacity; with battery control

[www.wago.com/787-876](http://www.wago.com/787-876)**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)**Item no.: 787-1671**

Lead-acid AGM battery module; 24 VDC input voltage; 5 A output current; Capacity: 0.8 Ah; with battery control

[www.wago.com/787-1671](http://www.wago.com/787-1671)**Tool**

## Operating tool

**Item no.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

[www.wago.com/210-719](http://www.wago.com/210-719)**Item no.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

[www.wago.com/210-720](http://www.wago.com/210-720)**Downloads****Documentation****Quick-Start Guide**

Quickstart for Software 759-870

V 1.0.0

pdf  
3.1 MB

Download

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## Configuration of the USV Control Units 787-870, 787-875 and 787-1675

**Bid Text**

787-870 X81 - Datei	2019 年7月12 日	xml 8.0 kB	Download
787-870 docx - Datei	2019 年7月12 日	docx 23.5 kB	Download
ausschreiben.de 787-870		URL	Download

**Instruction Leaflet**

Uninterruptible power supply DC 24 V, 10 A	2020 年4月27 日	pdf 1.3 MB	Download
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**Additional Information**

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 年8月18 日	pdf 2.2 MB	Download
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**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 年5月14 日	zip 562.7 kB	Download
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**Engineering-Software****Configuration and Commissioning Software**

WAGO UPS Shutdown Tool UPSV Shutdown Tool, for automatic shutdown of Windows PCs via UPS	4.13 2021 年11月18 日	exe 49.6 MB	Download
WAGO Software 759-870 Software 759-870 V4.13, for configuration and visualization of UPS control units 787-870, 787-875 and combined UPS unit 787-1675	4.13 2021 年5月10 日	zip 39.7 MB	Download

**CAD/CAE-Data**

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



#### CAD data

2D/3D Models 787-870	<a href="#">URL</a>	<a href="#">Download</a>
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#### CAE data

EPLAN Data Portal 787-870	<a href="#">URL</a>	<a href="#">Download</a>
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WSCAD Universe 787-870	<a href="#">URL</a>	<a href="#">Download</a>
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ZUKEN Portal 787-870	<a href="#">URL</a>	<a href="#">Download</a>
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### Environmental Product Compliance

#### Compliance Search

Environmental Product Compliance 787-870	<a href="#">URL</a>	<a href="#">Download</a>
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UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage; 10 A output current; LineMonitor; communication capability; 2,50 mm<sup>2</sup>

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### Installation Notes

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