

Data sheet | Item number: 2787-2146

Power supply; Pro 2; 1-phase; 24 VDC output voltage; 10 A output current;
TopBoost + PowerBoost; communication capability

www.wago.com/2787-2146



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

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Do you have any questions about our products?
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Item description

Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201

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- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Data

Technical data

Input

Phases	1
Nominal input voltage $U_{i\text{nom}}$	1 x AC 100 ... 240 V
Input voltage range	1 x AC 90 ... 264 V; DC 130 ... 240 V
Nominal mains frequency range	50 ... 60 Hz
Input current I_i	≤ 1.2 A (240 VAC; Nominal load); ≤ 2.7 A (100 VAC; Nominal load)
Inrush current	≤ 11 A (after 1 ms)
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 25 ms (230 VAC)

Output

Nominal output voltage $U_{o\text{nom}}$	DC 24 V (SELV)
Output voltage range	DC 24 ... 28 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o\text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Deviation	≤ 1 %
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set)
PowerBoost	DC 15 A (5 s)
TopBoost	Up to 600 %

Signaling and Communication

Signaling	Digital signal input and output (DI/DO)
Communication	USB (750-923 Communication Cable) Ethernet/IP (2789-9023 Communication Module) IO-Link (2789-9080 Communication Module) Modbus RTU (Communication Module 2789-9015) Modbus TCP (2789-9052 Communication Module)

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Efficiency/power losses

Power loss P_l	≤ 1 W (standby); ≤ 2.2 W (No load); ≤ 12 W (230 VAC; nominal load)
Efficiency (typ.)	95.2 % (230 VAC; 10 A; 25 °C)

Circuit protection

Internal fuse	T 6.3 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	16 A (for USA/Canada: 15 A)

Safety and protection

Isolation voltage (pri.-sec., AC)	3,510 V
Isolation voltage (pri.-PE, AC)	2,200 V
Isolation voltage (sec.-PE)	DC 0.5 kV
Protection class	I
Protection type	IP20; per EN 60529
Overvoltage category	III (≤ 2000 m a.s.l.); II (> 2000 m a.s.l.)
Pollution degree	2
Transient suppression (primary)	Yes
Overvoltage protection; secondary	Internal protective circuit ≤ 35 VDC (in the event of a fault)
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	$> 1,200,000$ h (per IEC 61709)

Connection data

Connection type 1	Input/Output/Signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 721 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 20 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

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Physical data

Width	50 mm / 1.969 inches
Height	130 mm / 5.118 inches
Depth from upper-edge of DIN-rail	130 mm / 5.118 inches
Note (dimensions)	Height without connector Height with connector: 166 mm

Mechanical Data

Mounting type	DIN-35 rail
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Material Data

Weight	1000 g
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Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C (Device starts at -40 °C (type-tested))
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> +55 °C and $U_i < 230$ VAC); -3 %/K (> +60 °C and $U_i \geq 230$ VAC)
Climatic category	3K3 (per EN 60721)
Operating altitude (max.)	5000 m

Standards and specifications

Conformity marking	CE
Standards/specifications	SEMI F47 EN 61010-1 EN 61010-2-201 EN 61204-3 UL 61010-1 UL 61010-2-201

Commercial data

ETIM 8.0	EC002540
ETIM 7.0	EC002540
Recupel Type	
PU (SPU)	1 pcs

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Packaging type	box
Country of origin	CN
GTIN	4055143907330
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 61010-2-201	E255817

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	MFD with product reference WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	A- E198726

Optional accessories

Communication

Communication module	
Item no.: 2789-9080 Communication module; IO-Link; communication capability	www.wago.com/2789-9080
Item no.: 2789-9015 Communication module; Modbus RTU; RJ45; communication capability	www.wago.com/2789-9015

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Item no.: 2789-9052 Communication module; Modbus TCP; communication capability	www.wago.com/2789-9052
Item no.: 2789-9023 Communication module; EtherNet/IP; communication capability	www.wago.com/2789-9023
Communication cable	
Item no.: 750-923 Configuration cable; USB connector; Length: 2.5 m	www.wago.com/750-923
Cables and pluggable connectors	
Communication cable	
Item no.: 750-923/000-001 Configuration cable; USB connector; Length: 5 m	www.wago.com/750-923/000-001
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
Marker carrier	
Item no.: 2789-1233 Marker carrier; for WMB or marking strips; Length: 33 mm	www.wago.com/2789-1233
Marker	
Item no.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-115
Tool	
Operating tool	
Item no.: 210-721 Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured	www.wago.com/210-721
Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	www.wago.com/210-720

Downloads

Documentation

Manual

Product Manual Power supply; Pro 2; 1-phase; 24 VDC output voltage; 10 A output current TopBoost + PowerBoost; communication capability	V 1.0.0 2022 年7月20 日	pdf 8.4 MB	Download
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Bid Text

2787-2146_EUSA	2019 年7月4 日	xml 8.1 kB	Download
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X81 - Datei

2787-2146_EUSA docx - Datei	2019 年7月4日	docx 23.9 kB	Download
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ausschreiben.de 2787-2146		URL	Download
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Instruction Leaflet

WAGO Pro 2 Power Supplies 1-phasig; 24 VDC / 10 A	V 1.1.0 2021 年4月26日	pdf 4.6 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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Engineering-Software

Configuration and Commissioning Software

WAGO Interface Configuration Software G2 SMALL The full setup only includes the WAGO Interface Configuration Software G2.	1.00.10.01 2022 年1月20日	exe 31.0 MB	Download
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WAGO Interface Configuration Software G2 FULL The full setup, in addition to the WAGO Interface Configuration Software G2, includes the installation for the Microsoft .NET Framework.	1.00.10.01 2022 年1月20日	exe 114.9 MB	Download
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WAGO IO-Link Configurator

WAGO IO-Link Configurator WAGO IO-Link Configurator allows configuration, parameterization, operation and monitoring of WAGO IO-Link Masters in the WAGO I/O System 750 and WAGO I/O System Field, and especially of the WAGO IO-Link devices connected to them.	V5.1.1-6618 2022 年2月16日	ZIP 91.8 MB	Download
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Additionally, WAGO IO-Link Configurator can be used for complete configuration and operation of all IO-Link devices of third-party manufacturers, as long as they comply with the IO-Link specification. A product's process data can be visualized graphically and stored in trend curves. Up to eight elements can be selected for visualization, and the data can be recorded for up to 24 hours.

Device description files for the IO-Link Masters (IOLM) or IO-Link Devices (IODD) can be used to integrate new devices into the tool at any time. Convenient access to the IO-Link user organization's IODDfinder is available for the IODDs. This allows automated, selective download of IODDs when integrating new IO-Link devices. An integrated IODD viewer allows detailed insight into the IODD device description.

WAGO IO-Link Configurator can be used either as a standalone program or integrated into engineering systems with a TCI interface and WAGO-I/O-CHECK.

IO-Link Configurator can also be used to integrate the IO-Link Master (750-657) of the WAGO I/O System 750 Series and to access all the configurator's functions. This is made possible by the WAGO I/O System 750 IO-Link Adapter, which can be retrofitted. The WAGO I/O System 750 IO-Link Adapter requires the current version of WAGO IO-Link Configurator and a current version of WAGO-I/O-CHECK.

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In addition, the download file contains the device descriptions for the respective fieldbus systems of the WAGO I/O System Field modules. These are pre-installed in the Configurator setup.

The WAGO IO-Link Configurator license is assigned to the specific PC on which it is installed (a workstation license).

Register now and test our engineering software for 30 days at no cost.

Runtime Software

Firmware

2787-2146, Stromversorgung; Pro 2	V 010513	zip	Download
WAGO_FW2787-2146_V010513_W	2021 年10月13日	1.2 MB	

CAD/CAE-Data

CAE data

ZUKEN Portal 2787-2146	URL	Download
EPLAN Data Portal 2787-2146	URL	Download

CAD data

2D/3D Models 2787-2146	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2787-2146	URL	Download
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Installation Notes

Product family

Pro 2
[Show all products from the family](#)

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