

UPSI-IP-2 Series

12 VDC / 8 A | 24 VDC / 6 A



- ✓ Outdoor DC/DC UPS for extreme environments
- ✓ Protection class IP67
- ✓ Robust aluminium housing
- ✓ Based on UPSI-1208/2406 technology
- ✓ For temperatures up to +70 °C
- ✓ LiFePO4 or Supercap packs as energy storage already included
- ✓ Stored energy up to 99 Wh (LiFePO4)
- ✓ Optional wide-range input available
- ✓ External mounting brackets pre-assembled
- ✓ Pressure compensation element and data interface included

Overview				
P/N	Input voltage*	Output voltage*	Output current / power	Type of battery
UPSI-1208IP-23U	12 VDC (12...16.5 VDC)	Normal: $V_{in} - 1$ V (Full load) Backup: 12 VDC	8 A / 96 W max.	Supercap pack BP-SUC-10066
UPSI-1208IP-23UW	7...36 VDC	Normal: 11.5 VDC Backup: 12 VDC	8 A / 96 W max.	Supercap pack BP-SUC-10066
UPSI-2406IP-24U	24 VDC (23...29.5 VDC)	Normal: $V_{in} - 1$ V (Full load) Backup: 23.5 VDC	6 A / 144 W max.	Supercap pack BP-SUC-16090
UPSI-2406IP-24UW	8...36 VDC	Normal: 23.5 VDC Backup: 23.5 VDC	5.42 A / 130 W max.	Supercap pack BP-SUC-16090
UPSI-2406IP-26U	24 VDC (23...29.5 VDC)	Normal: $V_{in} - 1$ V (Full load) Backup: 23.5 VDC	6 A / 144 W max.	LiFePO4 pack BP-LFP-1375
UPSI-2406IP-26UW	8...36 VDC	Normal: 23.5 VDC Backup: 23.5 VDC	4.6 A / 110 W max.	LiFePO4 pack BP-LFP-1375

*Values measured from/to input/output connector

Please note that using long input/output cables can cause a high voltage drop over these cables. Make sure that your DC source supplies enough voltage to compensate this drop-out voltage.

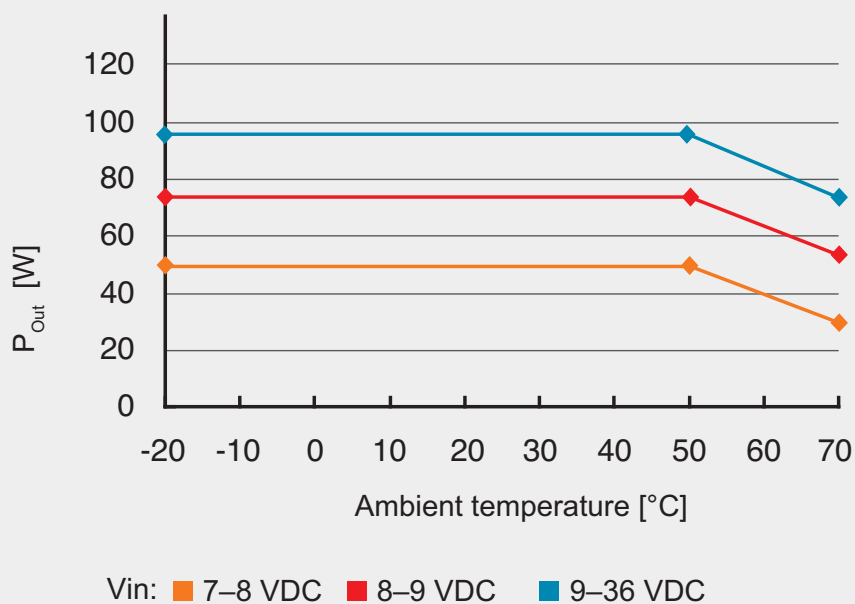
Product specific data	
Battery monitoring	Battery test is executed in normal mode
Shutdown detection	Via load sensor
Reboot function	Reboot function and time can be configured by software
Load sensor	Configurable via UPSI HID-Battery-Parameter software (download at www.bicker.de) UPS shuts down after 15 sec, if connected load decreases below set value and UPS is being in battery mode
Timer function	Configurable via UPSI HID-Battery-Parameter software in steps of single seconds (3600 sec max)

Warranty	
3 years warranty	
For LiFePO4 versions: only 1 year for the energy source	

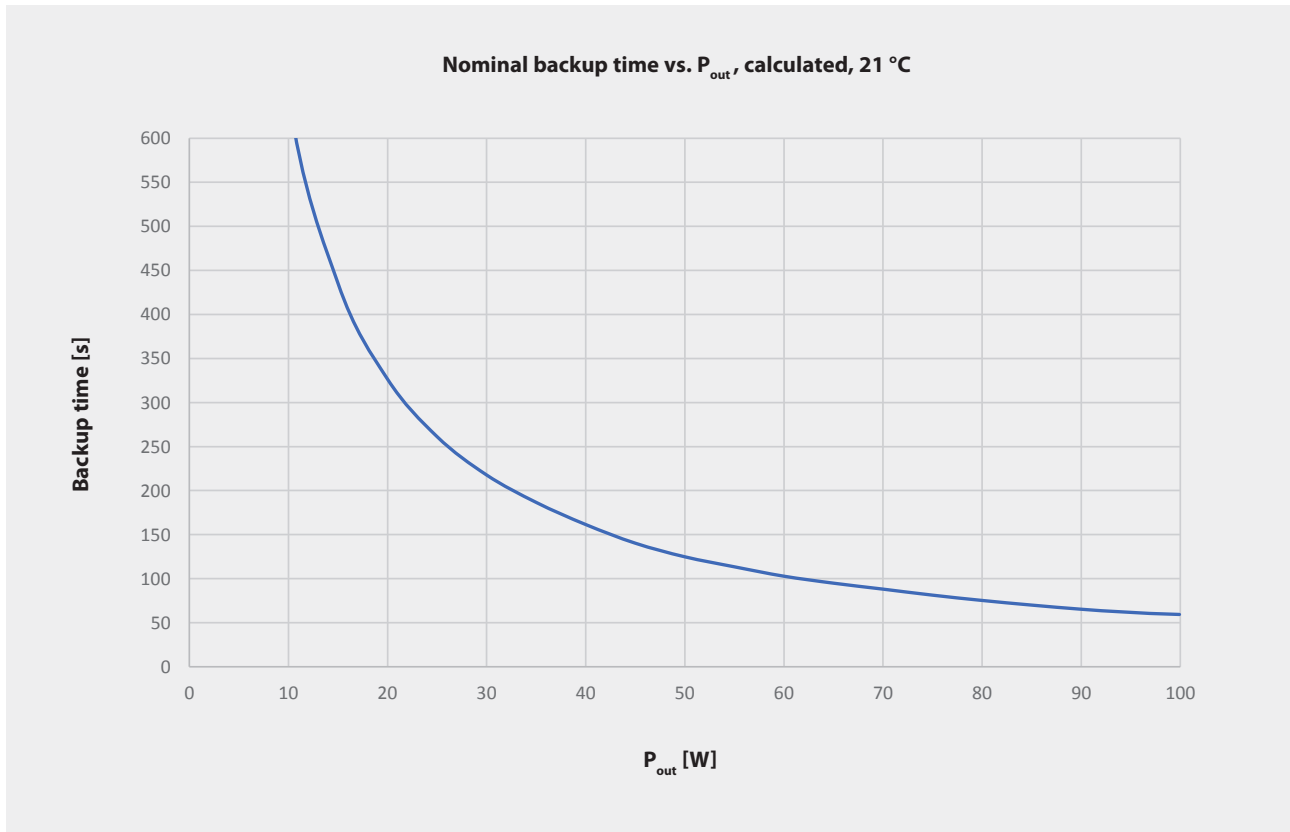
Technical data		
P/N	UPSI-1208IP-23U	UPSI-1208IP-23UW
UPS version	UPSI-1208	UPSI-1208
Input voltage*	12 VDC (12...16.5 VDC)	7...36 VDC (see diagram)
Input current	9.5 A max.	16 A max.
Output voltage*	Normal: $V_{in} - 1$ V (full load) Backup: 12 VDC	Normal: 11.5 VDC (full load) Backup: 12 VDC
Output current / power	8 A max. / 96 W max.	
Charging method	CC / CV / CP (dynamic)	
Protection	Deep discharge protection Overcurrent protection Reverse polarity protection	Deep discharge protection Overcurrent protection Over temperature protection: depends on ambient temperature and load
Interface	USB, USB-HID	
Type of battery / storage	Supercap pack BP-SUC-10066	
Energy of storage pack	9.8 kJ (useful 6.6 kJ)	
Temperature	Operating: -20...+70 °C Storage: -20...+70 °C	
Max. operation altitude	5000 m	
Derating (depending on operation altitude)	1500 m operation altitude or higher: 3.5 W / 500 m or reduction of operation temperature of 3.5 °C / 500 m	
Derating (depending on temperature)	-	See diagram
Dimensions (WxDxH)	202 x 267 x 117 mm ±0.5 m (inclusive mounting brackets) 202 x 232 x 110 mm ±0.5 mm (housing without brackets or connectors)	
Weight (net)	~3.45 kg	~3.55 kg

*Values measured from/to input/output connector

Derating UPSI-1208IP-23UW



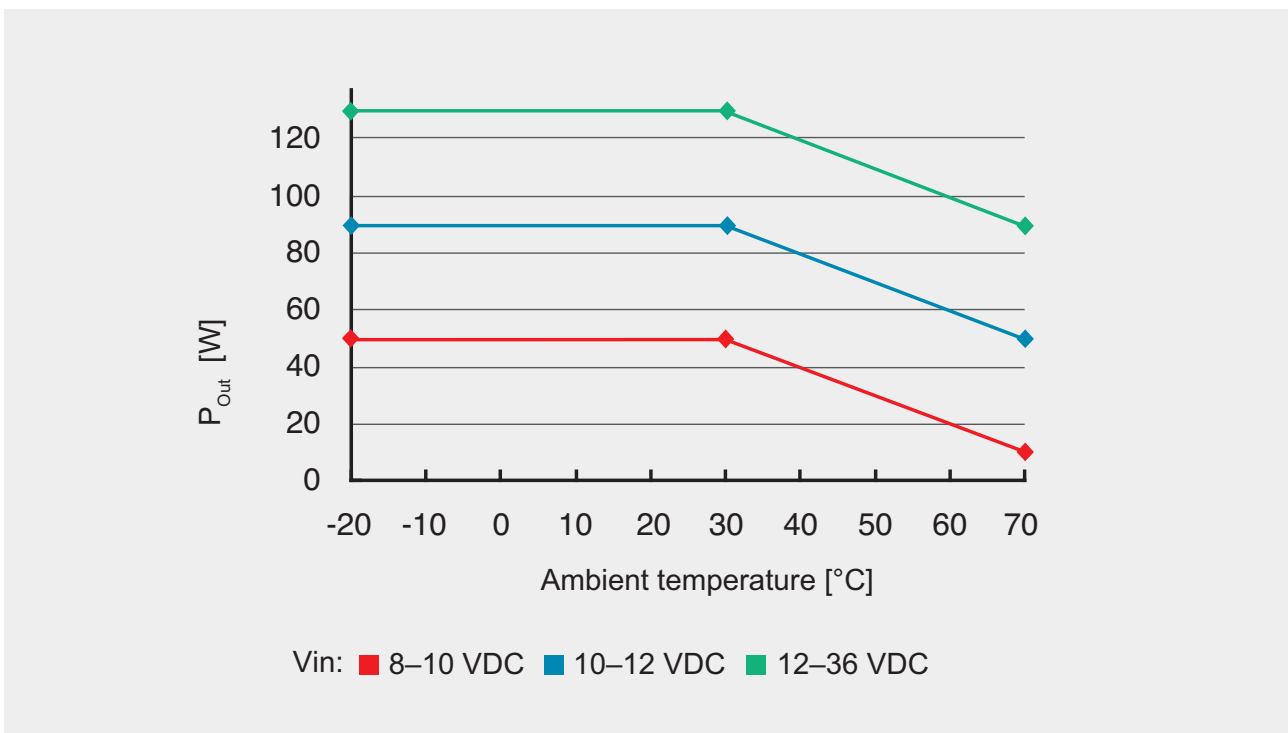
Backup time UPSI-1208IP-23U/-23UW



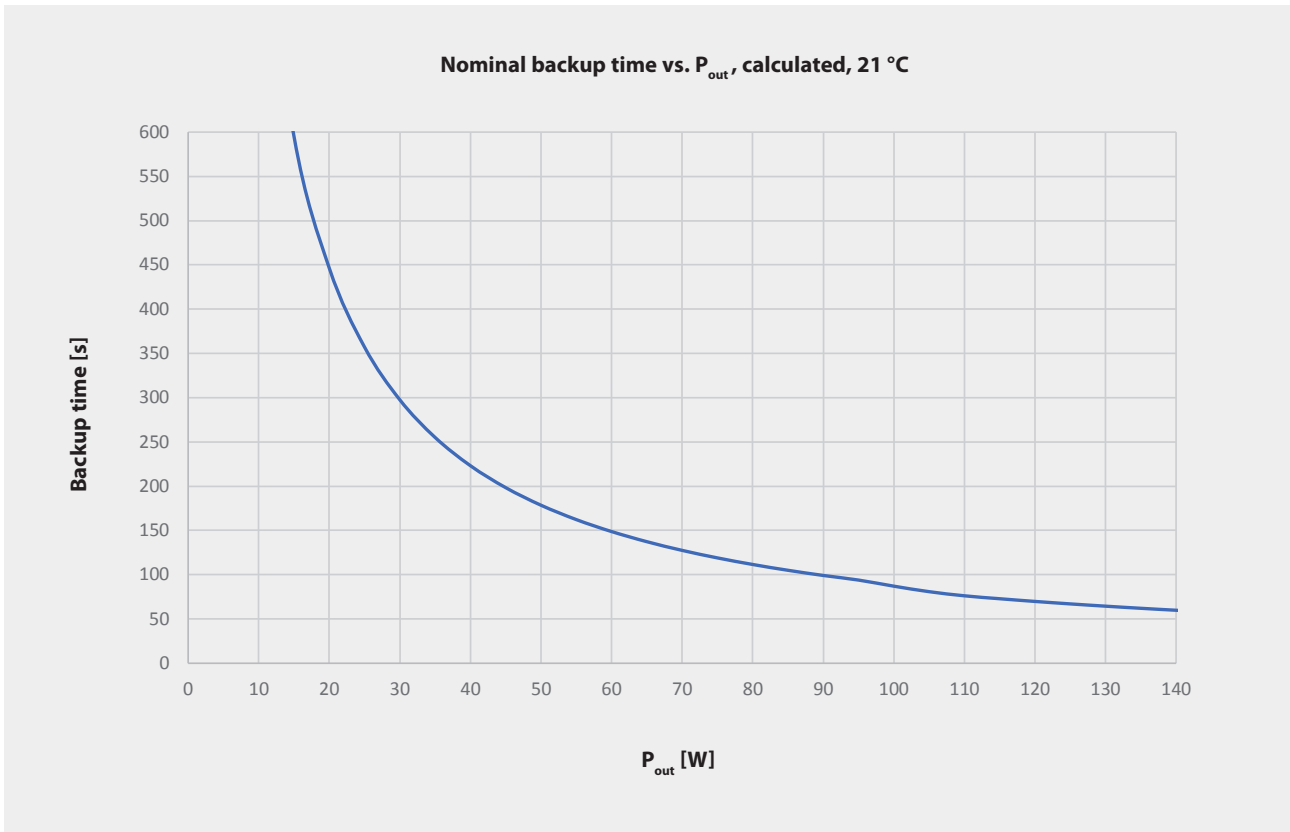
Technical data		
P/N	UPSI-2406IP-24U	UPSI-2406IP-24UW
UPS version	UPSI-2406	UPSI-2406
Input voltage*	24 VDC (23...29.5 VDC)	8...36 VDC (see diagram)
Input current	7.5 A max.	16 A max.
Output voltage*	Normal: $V_{in} - 1$ V (full load) Backup: 23.5 VDC	Normal: 23.5 VDC (full load) Backup: 23.5 VDC
Output current / power	6 A max. / 144 W max.	5.42 A max. / 130 W max.
Charging method	CC / CV / CP (dynamic)	
Protection	Deep discharge protection Overcurrent protection Reverse polarity protection	Deep discharge protection Overcurrent protection Over temperature protection: depends on ambient temperature and load
Interface	USB, USB-HID	
Type of battery / storage	Supercap pack BP-SUC-16090	
Energy of storage pack	13.5 kJ (useful 9.0 kJ)	
Temperature	Operating: -20...+70 °C Storage: -20...+70 °C	
Max. operation altitude	5000 m	
Derating (depending on operation altitude)	1500 m operation altitude or higher: 5.7 W / 500 m or reduction of operation temperature of 3.5 °C / 500 m	
Derating (depending on temperature)	Backup mode: +50...+70 °C, 100 mA (2.4 W)/°C	See diagram
Dimensions (WxDxH)	202 x 267 x 117 mm ±0.5 mm (inclusive mounting brackets) 202 x 232 x 110 mm ±0.5 mm (housing without brackets or connectors)	
Weight (net)	~3.69 kg	~3.79 kg

*Values measured from/to input/output connector

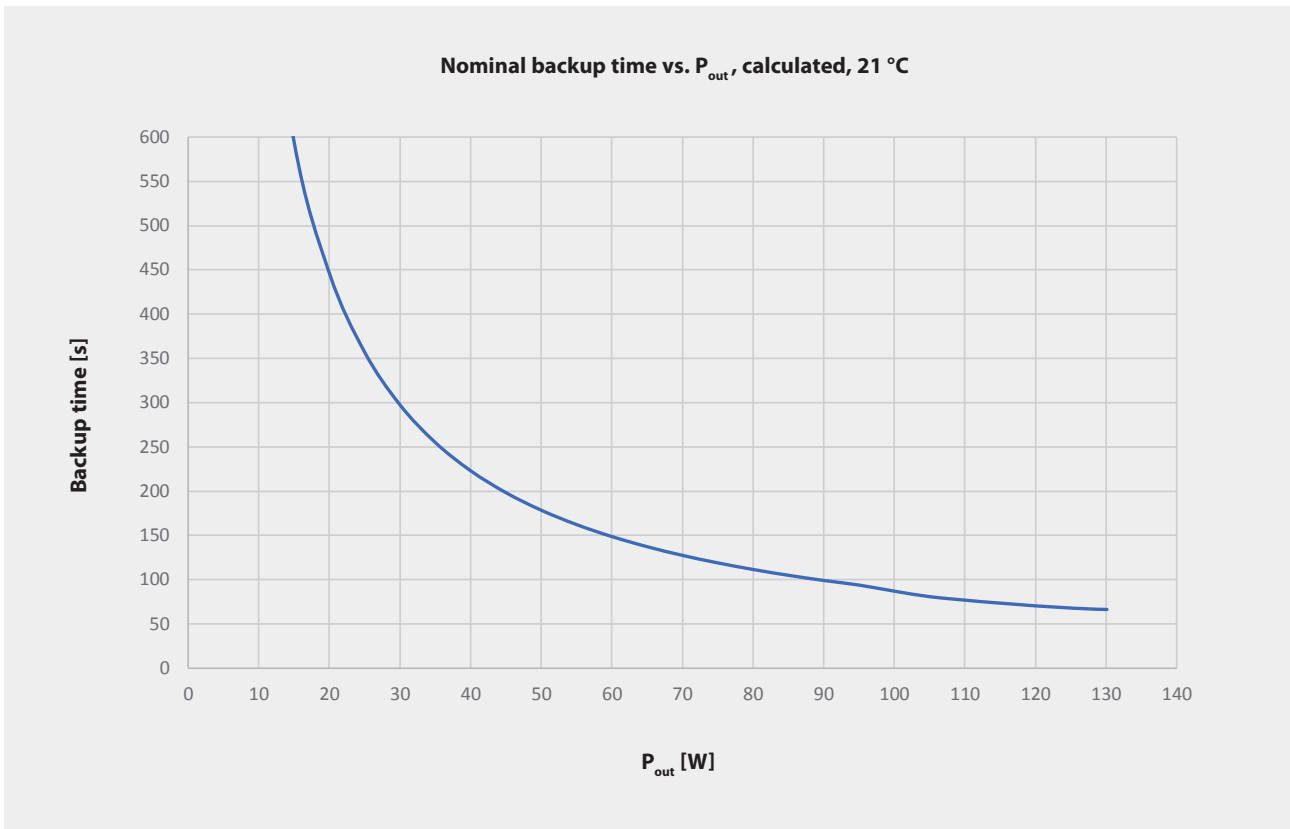
Derating UPSI-2406IP-24UW



Backup time UPSI-2406IP-24U



Backup time UPSI-2406IP-24UW

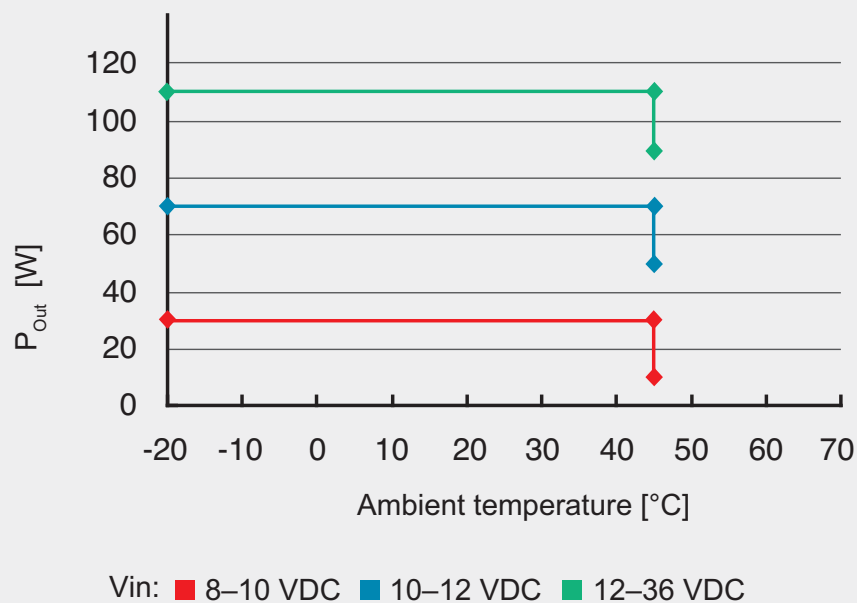


DC UPS

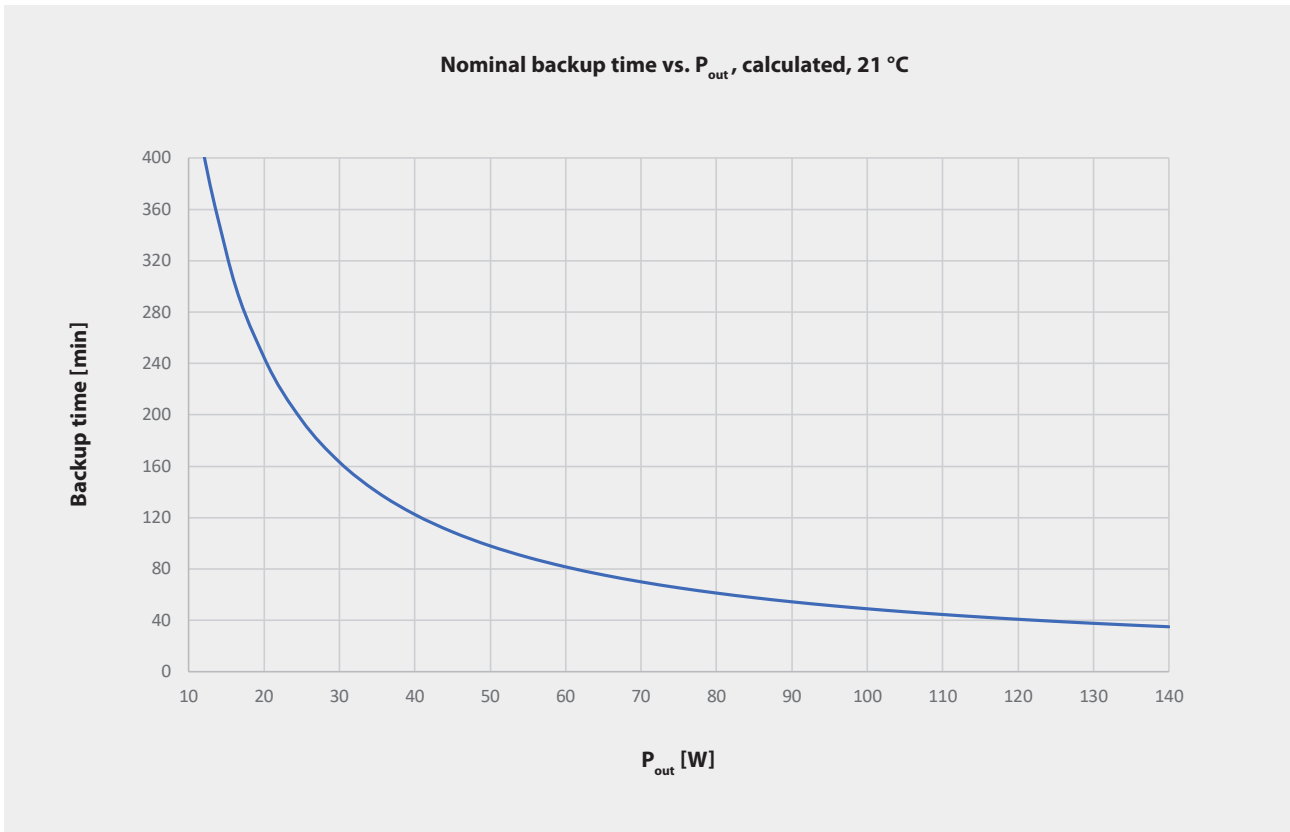
Technical data		
P/N	UPSI-2406IP-26U	UPSI-2406IP-26UW
UPS version	UPSI-2406	UPSI-2406
Input voltage*	24 VDC (23...29.5 VDC)	8...36 VDC (see diagram)
Input current	7.5 A max.	16 A max.
Output voltage*	Normal: $V_{in} - 1$ V (full load) Backup: 23.5 VDC	Normal: 23.5 VDC (full load) Backup: 23.5 VDC
Output current / power	6 A max. / 144 W max.	4.6 A max. / 110 W max.
Charging method	CC / CV / CP (dynamic)	
Protection	Deep discharge protection Overcurrent protection Reverse polarity protection	Deep discharge protection Overcurrent protection Over temperature protection: depends on ambient temperature and load
Interface	USB, USB-HID	
Type of battery / storage	LiFePO4 pack BP-LFP-1375	
Energy of storage pack	99 Wh	
Temperature	Operating: -20...+45 °C Storage: -20...+55 °C	
Max. operation altitude	5000 m	
Derating (depending on operation altitude)	1500 m operation altitude or higher: 5.7 W / 500 m or reduction of operation temperature of 3.5 °C / 500 m	
Derating (depending on temperature)	-	See diagram
Dimensions (WxDxH)	202 x 267 x 117 mm ±0.5 mm (inclusive mounting brackets) 202 x 232 x 110 mm ±0.5 mm (housing without brackets or connectors)	
Weight (net)	~3.72 kg	~3.82 kg

*Values measured from/to input/output connector

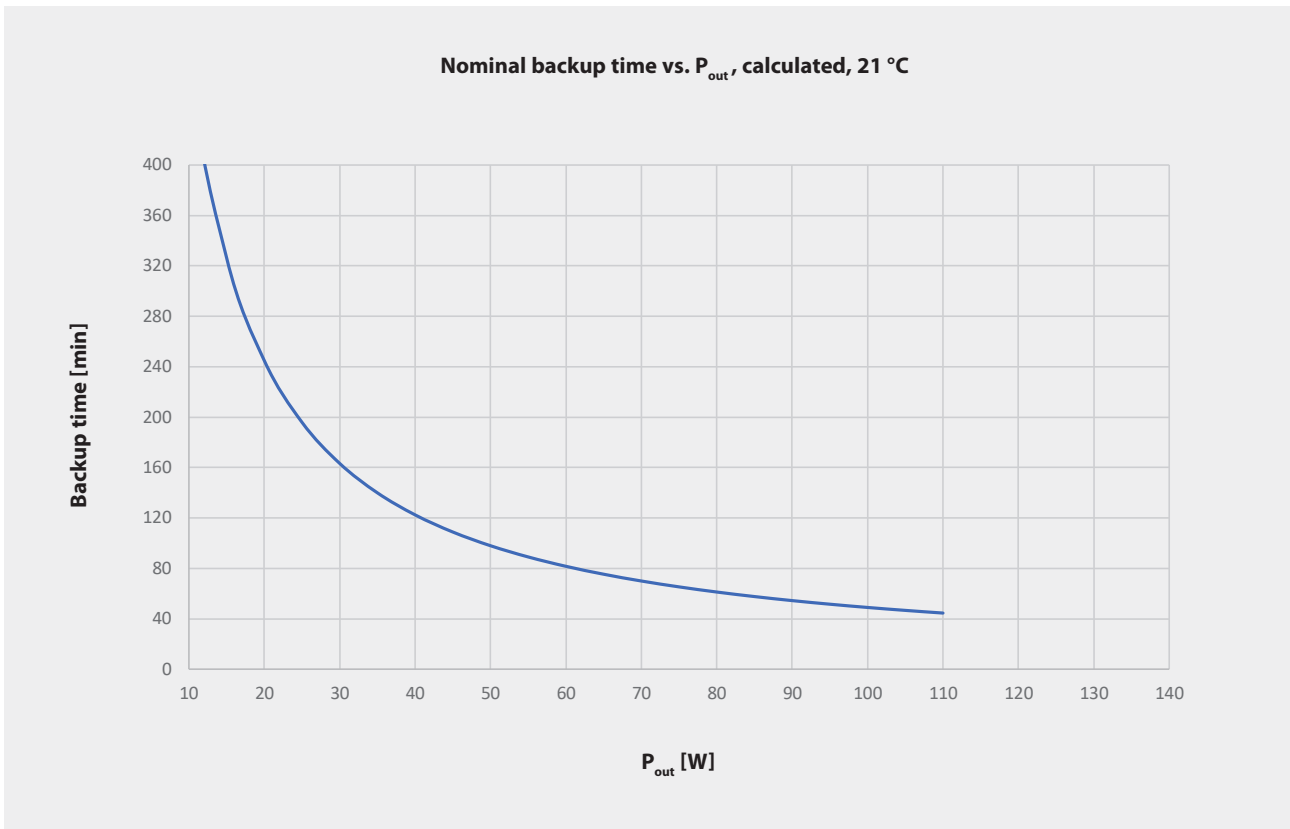
Derating UPSI-2406IP-26UW



Backup time UPSI-2406IP-26U

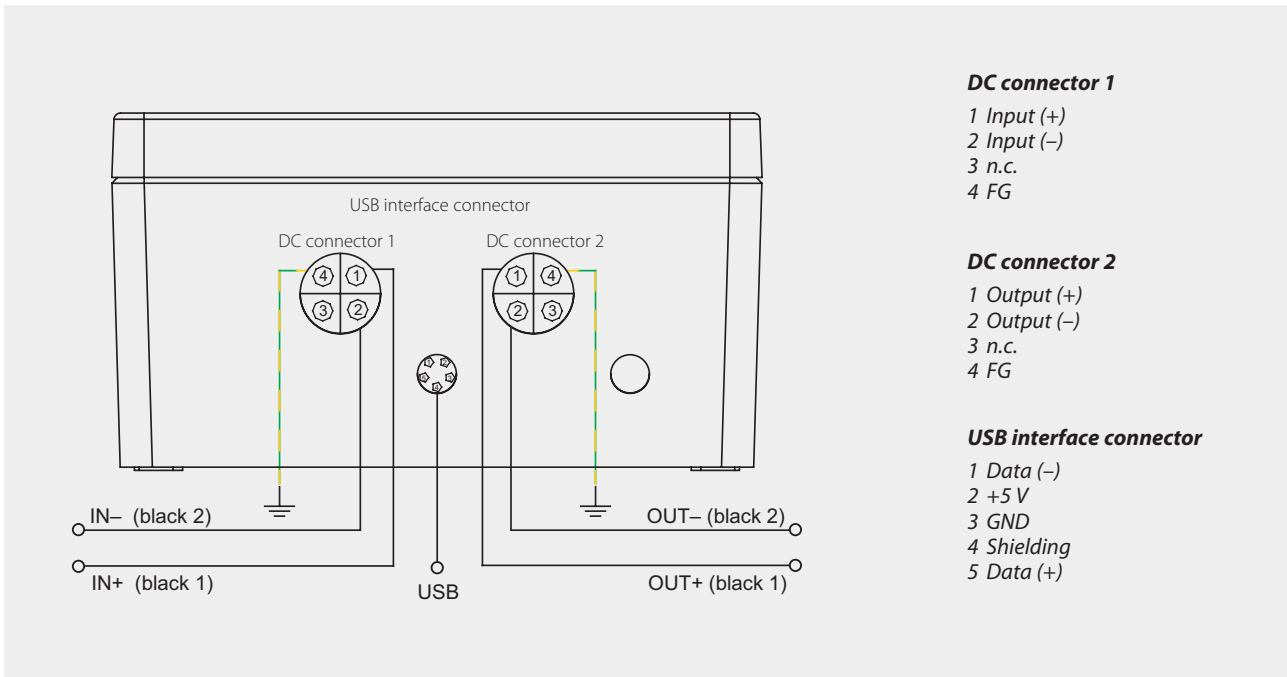


Backup time UPSI-2406IP-26UW



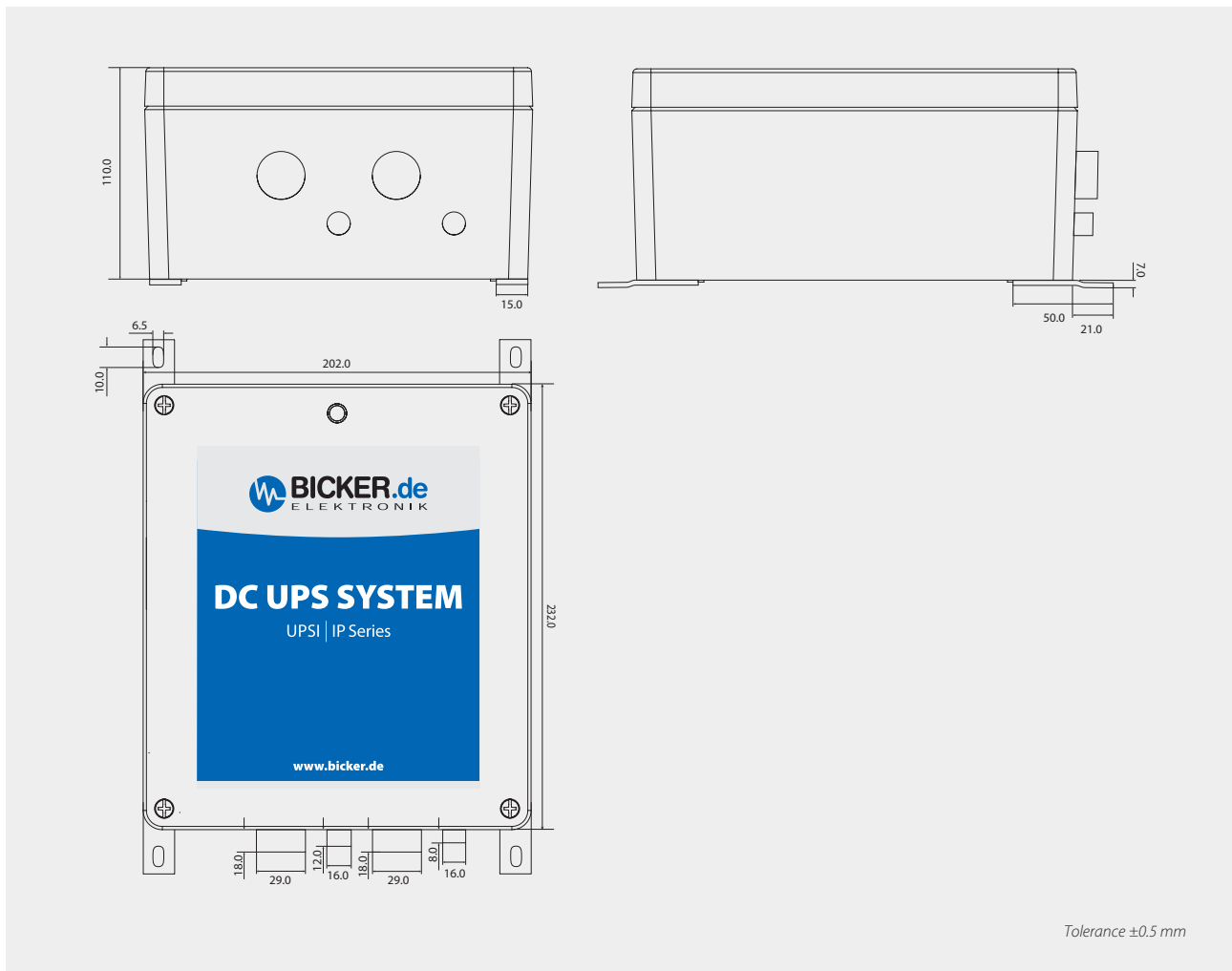
DC UPS

Connection



Connector	Description	Manufacturer	Part No.
DC connector 1 (case side) for V_{IN}	RD24 flange plug, poles 3+PE	Binder Connector	09 4223 150 04
DC connector 2 (case side) for V_{OUT}	RD24 flange socket, poles 3+PE	Binder Connector	09 4224 00 04
USB interface connector (case side)	Snap-in flange socket, 5 poles	Binder Connector	99 9116 00 05
DC counter connector 1 (cable side)	RD24 cable socket, poles 3+PE	Binder Connector	99 0210 00 04
DC counter connector 2 (cable side)	RD24 cable plug, poles 3+PE	Binder Connector	99 0209 00 04
USB interface counter connector (cable side)	Snap-in cable plug, 5 poles	Binder Connector	99 9113 02 05

Drawing



Scope of delivery

Quantity	Description
1x	Input cable, 3m, open end, 2.5 mm ²
1x	Output cable, 3m, open end, 2.5 mm ²
1x	USB/USB-HID interface cable, 3 m, USB type A plug

Safety information and notes



Please consider to each country's own regulation about recycling and disposal of used batteries etc. in hazardous waste or resending to any recycling organization. The device including the battery pack should not be exposed to fire, immersed under water, opened, short-circuited, reversed or overheated. During storage it should not be exposed to temperatures outside the specification and should not be pushed too heavy and not exposed to high pressure. For detailed information about the LiFePO₄ and Supercap storage packs please see also the separate datasheets.