

DC2412-UPS

60 Watt

- DC/DC converter with backup function
- Supercaps for energy storage
- Maintenance-free
- High cycle stability > 500 000
- Charge time <60 sec at maximum charge current
- Extended temperature range -20...+70 °C
- Compact design
- Active reverse polarity protection
- Power Fail signal via relay, RS232 connection

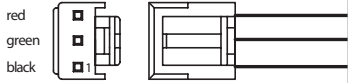
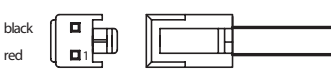



Technical data

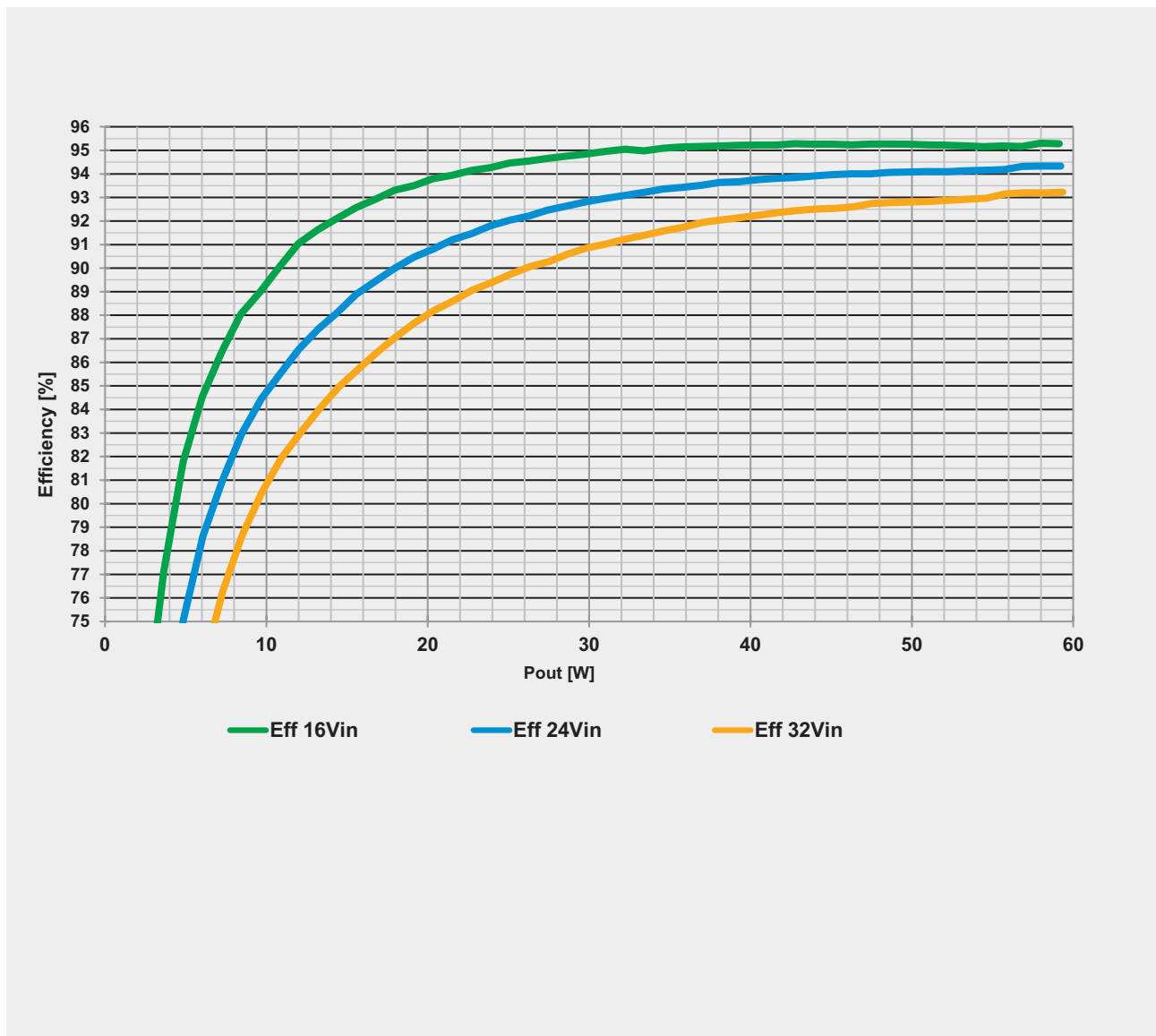
Input voltage	24 VDC (16...32 VDC)
Input current	2.8 A nom.
Output power	60 W
Output voltage	12 VDC $\pm 2\%$
Output current	5 A
Output ripple	≤ 30 mV
Efficiency	94 % typ.
Charge current	Depending on load up to 5 A
Charging method	CC
Storage type	Supercaps 4x 100 F
Charging time	<60 sec at maximum charge current
Backup time	See diagram
Protection	Overcurrent protection – Non LATCH Active reverse polarity protection
Temperature	Operating: -20...+70 °C / Storage: -20...+70 °C
Humidity	Operating: 10...85 % RH, non-condensing / Storage: 10...90 % RH, non-condensing
Dimensions (WxDxH)	135 x 79.5 x 35 mm incl. supercaps
Weight (net)	0.17 kg

Optional Accessories

▷▷▷ For detailed information please visit our website www.bicker.de and refer to the article number.

<p>PSZ-1036 Input cable</p> <p>3-pole, length 500mm, AWG 18, ends open</p>	<p>PSZ-1037 Output cable</p> <p>2-pole, length 500mm, AWG 18, ends open</p>	<p>PSZ-1009 Male adapter</p> <p>DCplug: 2.5 x 5.5 mm, AWG 26-12</p>
		

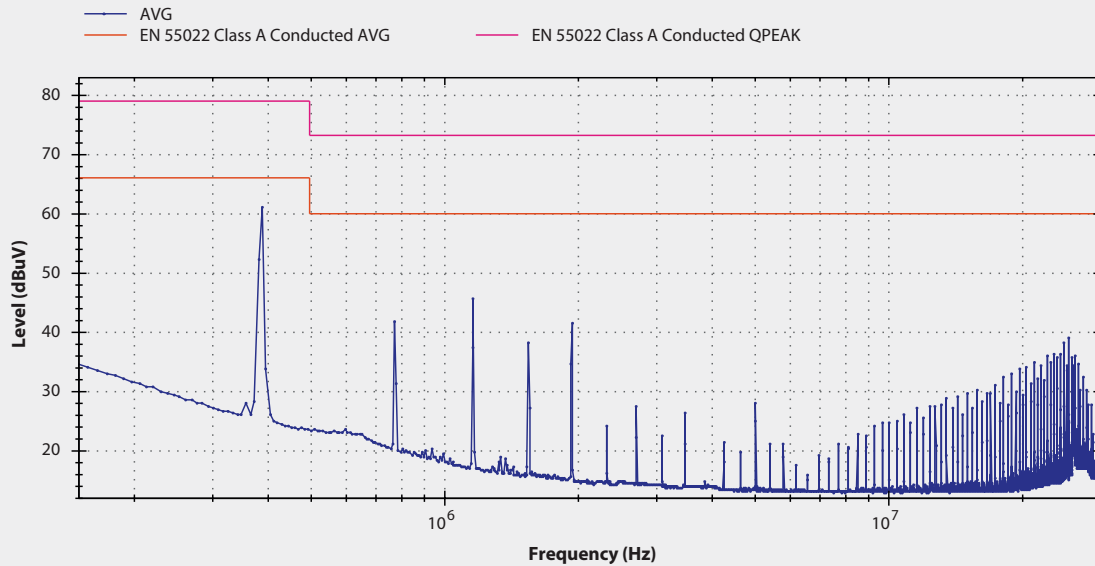
Efficiency curve



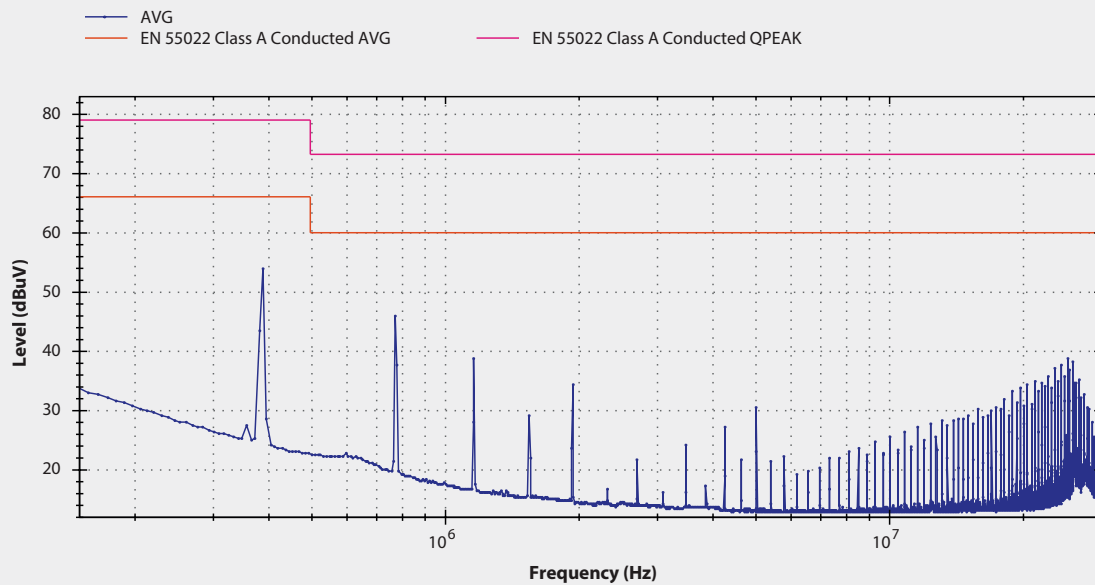
DC/DC converters

EMC curves

Path 0

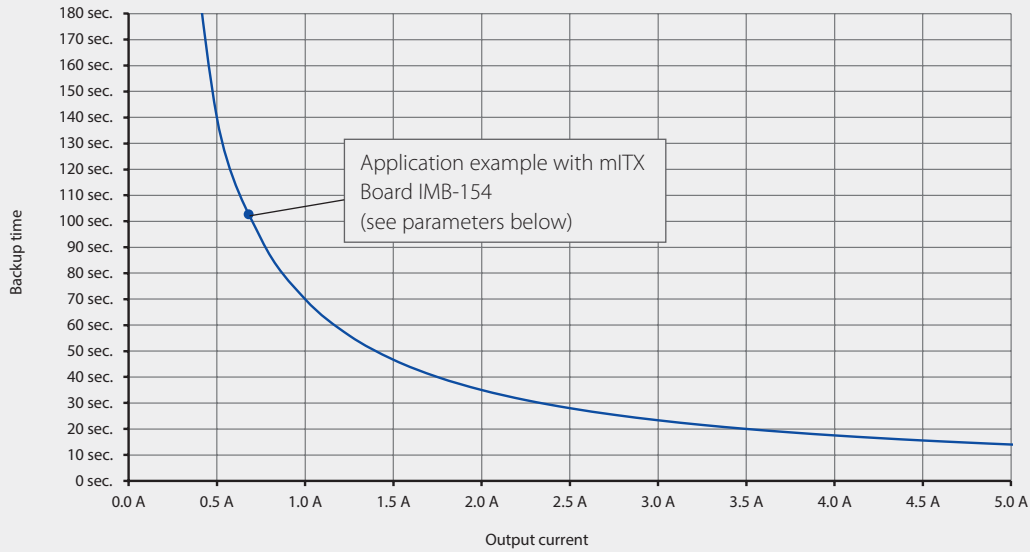


Path 1

**Measurement conditions**

V_{in} = 24 V
I_{out} = 5 A full load
T_{amb}: 21 °C

Backup time



Standby@No Load >30 min
 — @ nom. Cap. & 25 °C

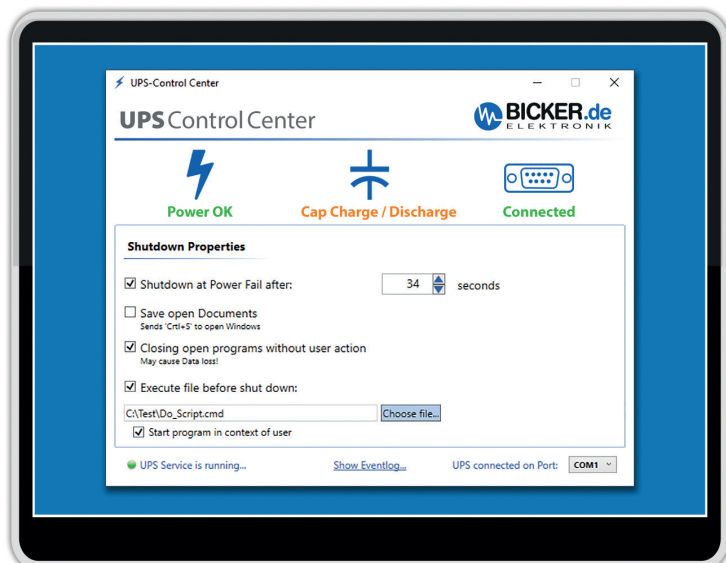
Parameters of the test system for the backup curve

Board	IMB-154 L0.36 SN: 59M0X2003883 CPU: Braswell N3150; 4x 1.60GHz	ROM	1x mSATA 32GB Type: CIE MSM300M JB032GS SN: CIE164905767
RAM	2 x 4 GB / DDR3 SO-DIMM 1600MHz FB Type: CIR-S3SUSKA 1604G SN: CIR 154630106 CIR 154630106	OS	Microsoft Windows 10 Enterprise Evaluation Version 1511 Build 10586.589 (2016/09/16)
		Test Software	BurnInTest V7.1 Pro
		Test results	100% load: 1 min. 43 sec. = 103 sec

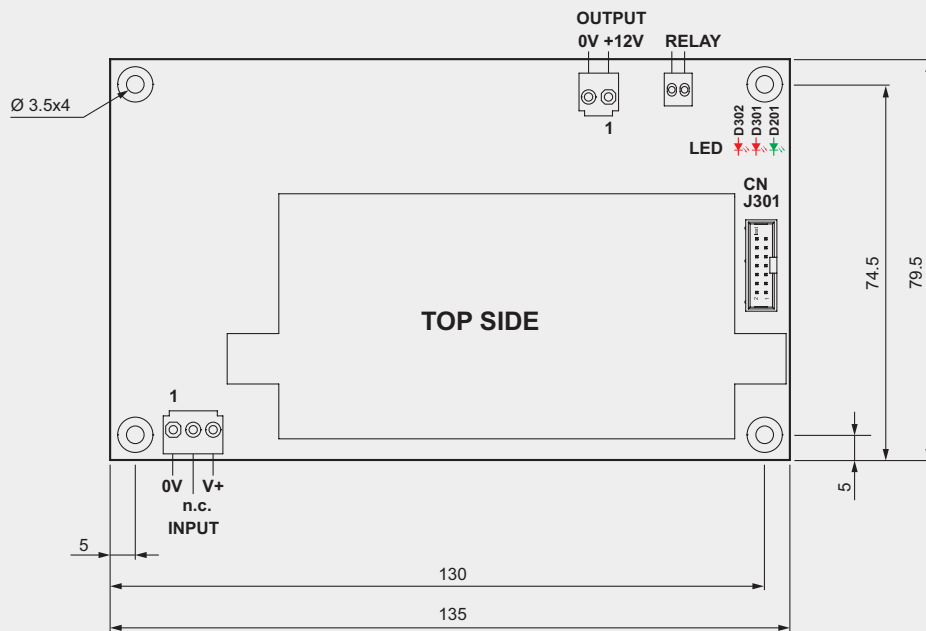
Software UPS Control Center

UPS Control Center

The UPS software is available for free download directly on the product page at www.bicker.de.



Drawing DC2412-UPS



Connectors

INPUT	VHR-3N (1: 0V, 2: n.c., 3: V+)
OUTPUT	VHR-2N (1: V+, 2: 0V)
CN J301	WE-B61201421621
RELAY	WR-691210910002

LED

D302	RED	Caps charging state < 90%
D301	RED	Power fail, backup mode
D201	GREEN	Normal mode

CN J301 – Pin assignment

01	RTS signal	10	SMB alert
02	DSR signal (caps loaded)	11	GND
03	NC	12	XSDA I ² C
04	RTS signal	13	+12V
05	NC	14	XSCL I ² C
06	CTS signal (power fail)		
07	NC		
08	NC		
09	GND		

Tolerance ±0.5 mm

Specification is subject to change without notice. Errors excepted. Status as at: 05.10.2016

Recommended power supplies from Bicker Elektronik >>> *Additional recommendations on www.bicker.de*

BEO-1024M	BEO-1524M	BET-0924	BET-1024M	BED-12024	BEN-10024
100 Watt	150 Watt	90 Watt	100 Watt	120 Watt	100 Watt

