DC2412-UPSD

60 Watt

- **Supercap DC UPS with wide-range input 16…32 V DC and uninterruptible 12 V DC output**
- **Maintenance-free**
- **High cycle stability > 500 000**
- **Charge time <60 sec at maximum charge current**
- **Extended temperature range -20…+65 °C**
- **Active reverse polarity protection**
- **Power Fail signal via relay, RS232 connection**
- **Reboot Function**
- **Operation of UPS at host without software possible**
- **Output release from 90 % supercap capacity**

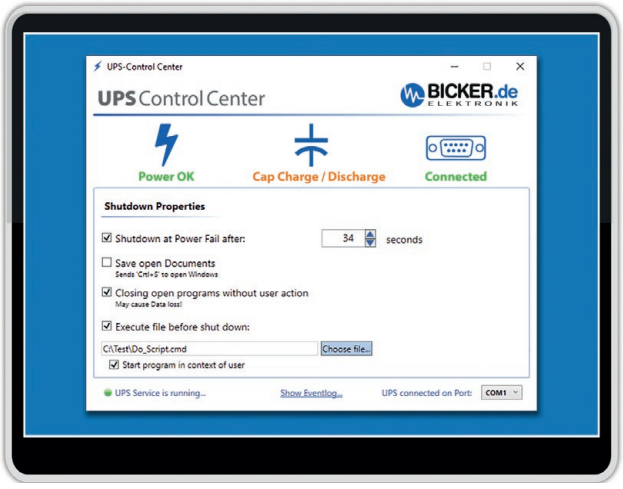
5 YEARS Delivery · Fanless · Premium · 24/7 Operation · °C Extended · 90 Eco

NEW

Including **Software** UPS Control Center

Technical data

Input voltage	24 VDC (16…32 VDC)
Input current	2.8 A nom.
Output power	60 W
Output voltage	12 VDC ±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…+65 °C / Storage: -20…+70 °C
Humidity	Operating: 10…85 % RH, non-condensing / Storage: 10…90 % RH, non-condensing
Dimensions (W x D x H)	36 x 103 x 147 mm
Weight (net)	0.367 kg

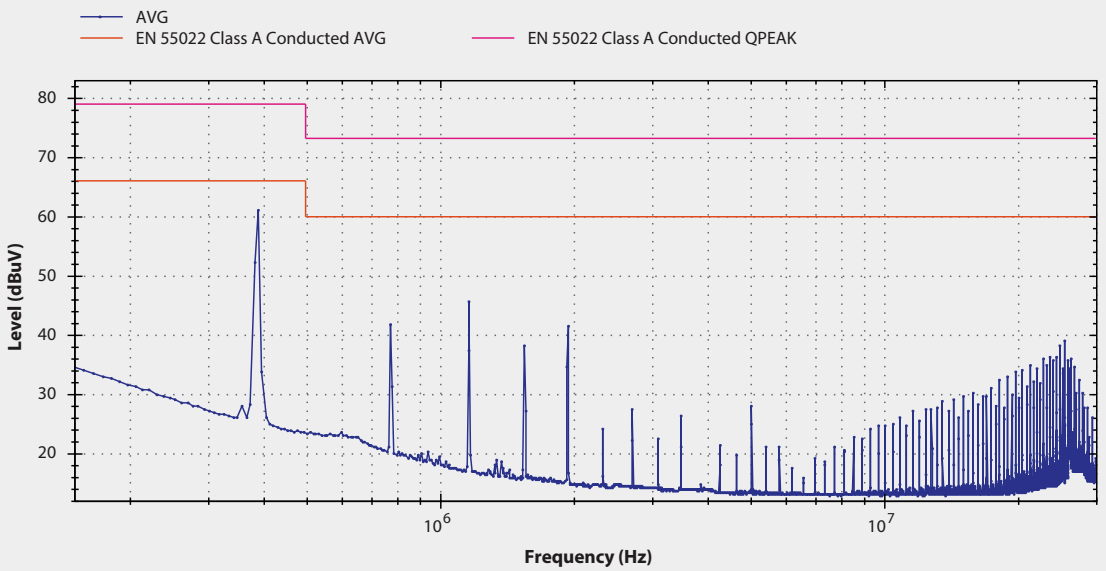


UPS Control Center
The software „UPS Control Center" is available for free download directly on the product page at **www.bicker.de.**

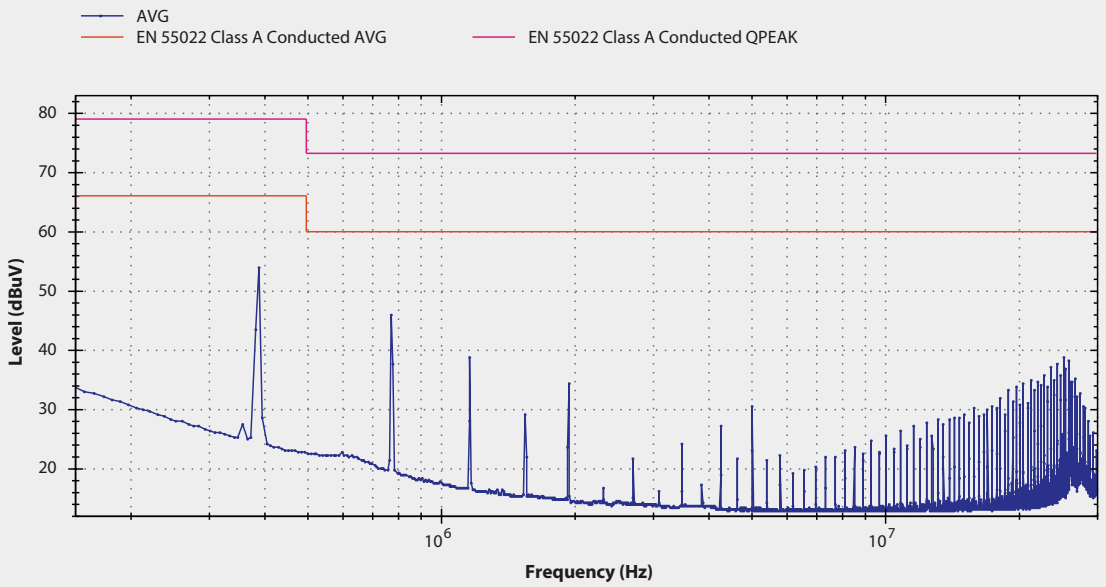
DC UPS

EMC curves

Path 0

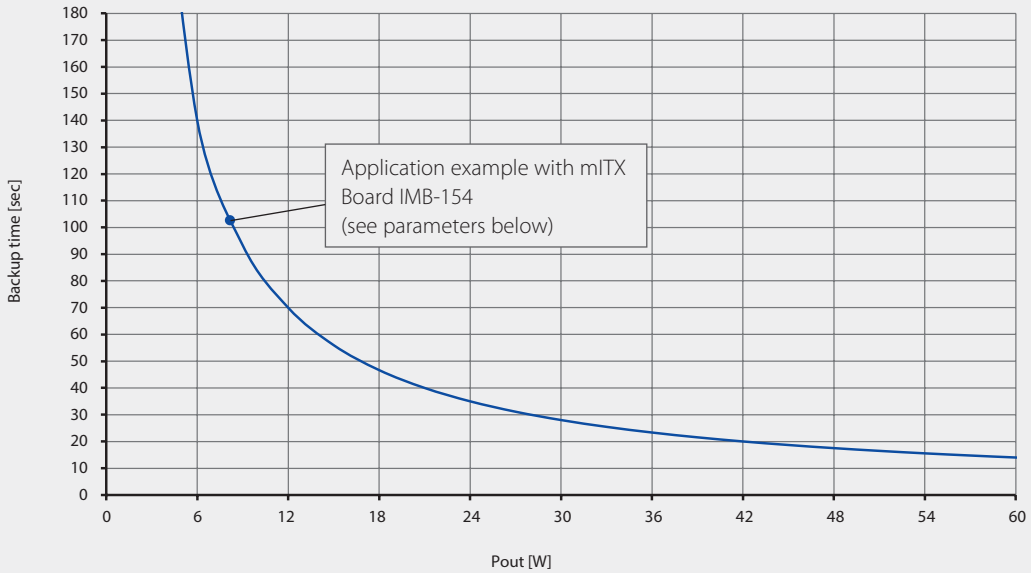


Path 1



Measurement conditions
Vin = 24 V
Iout = 5 A full load
Tamb: 21 °C

Backup time



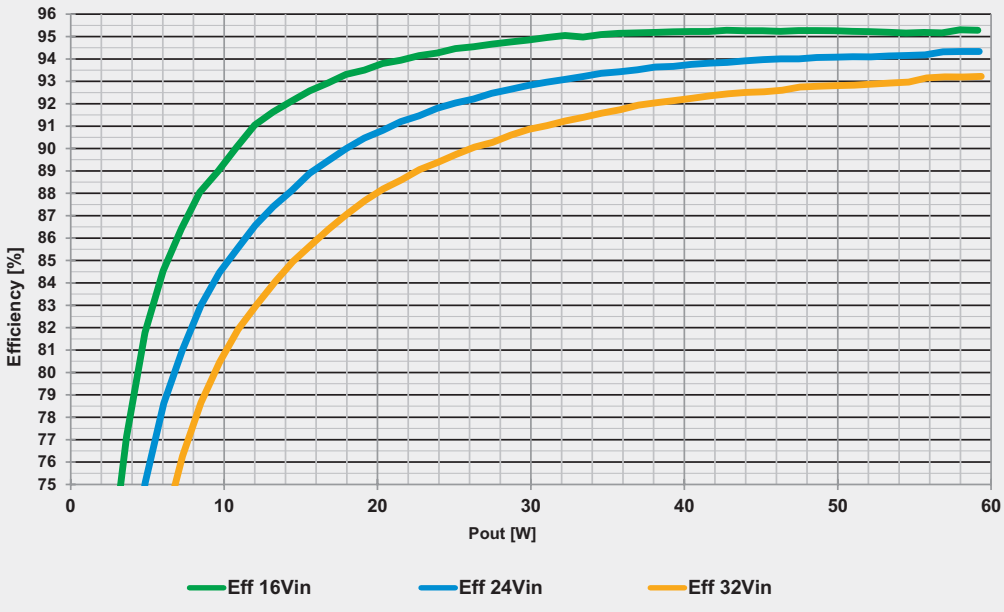
Standby @ No Load >30 min
— @ nom. Cap. & 25 °C

Parameters of the test system for the backup curve

Board	IMB-154 L0.36 SN: 59M0X2003883 CPU: Braswell N3150; 4x 1.60 GHz
RAM	2 x 4 GB / DDR3 SO-DIMM 1600 MHz FB Type: CIR-S3SUSKA 1604G SN: CIR 154630106 CIR 154630106

ROM	1x mSATA 32 GB Type: CIE MSM300M JB032GS SN: CIE164905767
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**

Efficiency curve



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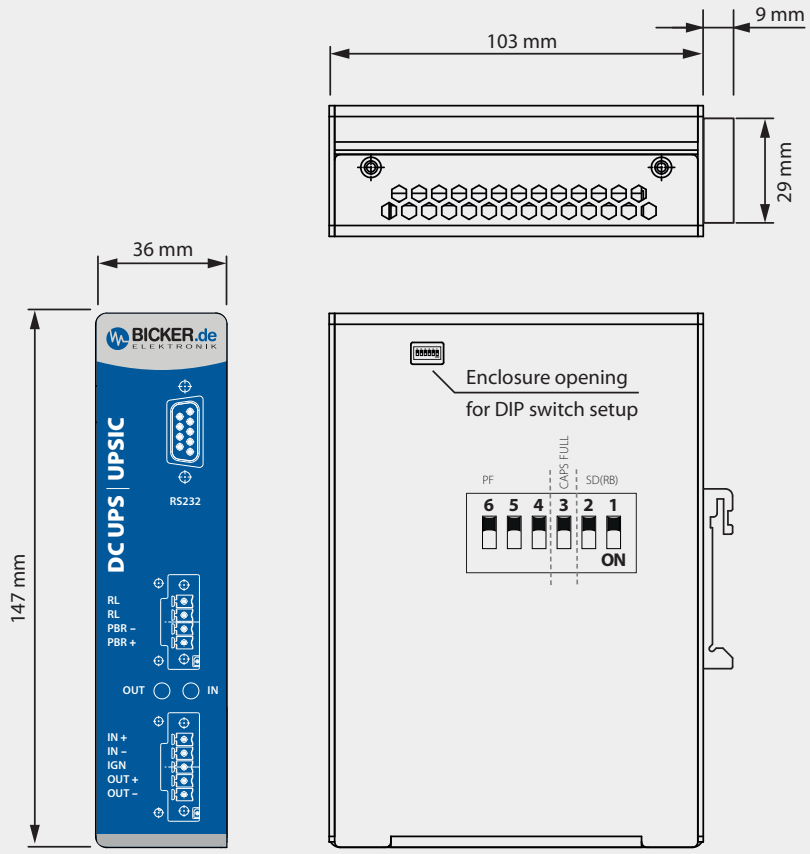
Drawing DC2412-UPSD



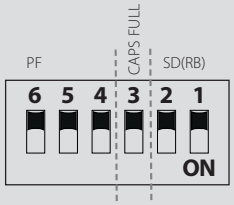
Counterpart Relay connector:
Dinkle EC381VM-04P

Counterpart Power In-Out connector:
Dinkle EC381VM-05P

Counterparts included in scope of delivery

Power Fail: relay contact 3+4 = 0 Ω
0.5 A @ 125 VAC / 1 A @ 24 VDC

DIP switch setup



Connectors

RS232

01	DCD at PC – Detection cable connected
02	TXD (is connected to RXT at PC)
03	RXD (is connected to TXD at PC)
04	Shutdown signal detection
05	GND
06	DSR at PC – Detection caps loading status
07	RTS at PC – Supply voltage
08	CTS at PC – Power Fail detection
09	N/A

RL / PBR

04 / RL	Relay connection
03 / RL	Relay connection
02 / PBR –	(V–) Shutdown-Signal (Impulse 200-400 ms)
01 / PBR +	(V+) Shutdown-Signal (Impulse 200-400 ms)

IN / IGN / OUT

05 / IN +	V+ Input
04 / IN –	V– Input
03 / N.C.	N.C.
02 / OUT +	V+ Output
01 / OUT –	V– Output

Power Fail (PF) - Timer

6	5	4	PIN
ON	**ON**	**ON**	Software
OFF	**ON**	**ON**	3s
ON	OFF	**ON**	8s
OFF	OFF	**ON**	20s
ON	**ON**	OFF	40s
OFF	**ON**	OFF	60s
ON	OFF	OFF	100s
OFF	OFF	OFF	150s

Output release

PIN 3	
ON	Output released when V_{CAP} over 90 %

Shutdown Timer

PIN	2	1
No Reboot	**ON**	**ON**
Reboot after 10s	OFF	**ON**
Reboot after 30s	**ON**	OFF
Reboot after 60s	OFF	OFF

Tolerance ±0.5 mm