

■ Main Features

- ⌋ Low cost DC-UPS with charging function of a 12 or 24Vdc battery
- ⌋ Suitable for power supplies with adjustable output
- ⌋ Allows to feed the load and to charge the battery simultaneously
- ⌋ Built-in battery overcurrent protection fuse
- ⌋ Battery deep discharge protection
- ⌋ To be used with lead acid and lithium batteries (compatible with lead acid batteries)
- ⌋ Instantaneous LOAD switch to BACKUP mode

TECHNICAL DATA

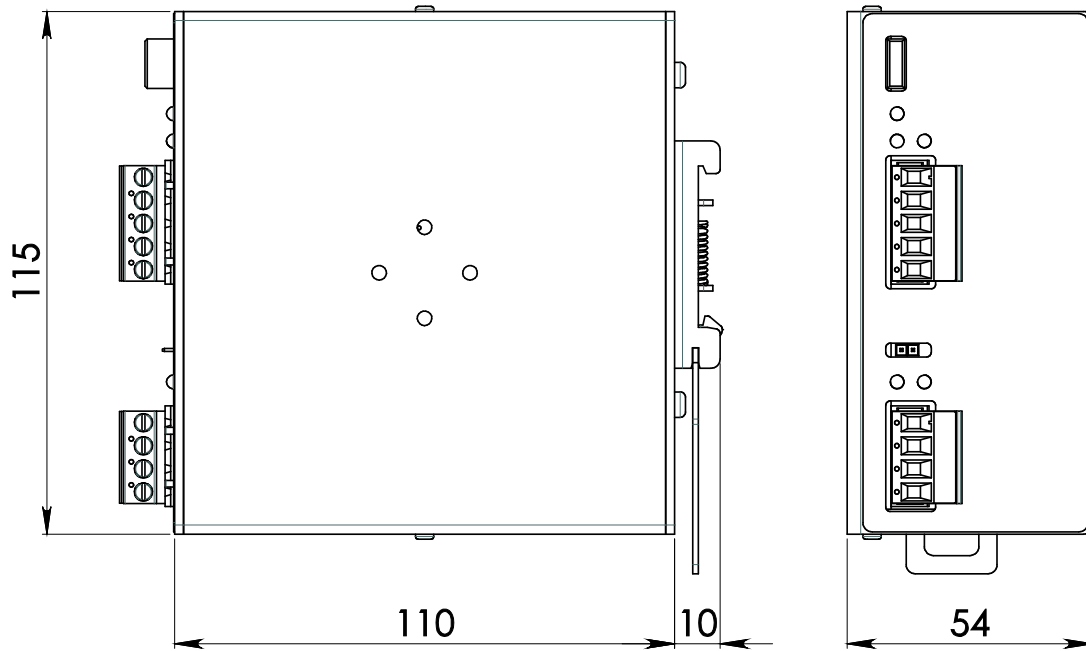
Model type	NUPS12	NUPS24
OUTPUT DATA		
Load nominal voltage	10...15Vdc	20...28Vdc
Charging current Limit (Settable)	2.0A or 4.0A	
Load maximal current	10A	
Battery fuse	15A / 32V - Mini blade type, user replaceable	
Battery float voltage	[Vin - 0.4V] 11Vdc min.	[Vin - 0.4V] 26Vdc min.
Deep discharge cut-off voltage	9.2Vdc ± 0.5V	18Vdc ± 0.5V
Chargeable capacity of the battery vs power supply voltage	75% @ 13Vdc 85% @ 13.5Vdc 100% @ 14Vdc	75% @ 26Vdc 85% @ 27Vdc 100% @ 28Vdc
"Batt. OK" LED	ON for U Batt. > 11.6Vdc ± 0.2V	ON for U Batt. > 23.5Vdc ± 0.2V
"Batt. LOW" LED	ON for U Batt. < 11.6Vdc ± 0.2V	ON for U Batt. < 23.5Vdc ± 0.2V
Protections	<ul style="list-style-type: none"> ▪ Battery reverse connection ▪ Battery short-circuit/overload ▪ Battery deep discharge 	
Status Signals	<ul style="list-style-type: none"> ▪ PS OK - green LED ▪ LOAD OK - amber LED ▪ BATT. OK - green LED ▪ BATT. LOW - red LED ▪ REVERSE POLARITY - red LED ▪ Dry contact (SPDT, 24Vdc / 1A) 	
INPUT DATA		
Input DC rated voltage from power supply	13...14.5Vdc (UL certified)	26...28.5Vdc (UL certified)
Input DC rated current	3...15A	
GENERAL DATA		
Operating temperature ¹	- 40°C...+ 70°C UL certified up to 60°C	
Derating	- 0.25A/°C over 60°C	
Storage temperature	- 40°C...+ 80°C	
Humidity	5...95% r.H. non condensing	
Life time expectation	64'000h (7.3 years) at 25°C ambient full load	
Overvoltage category	▪ EN50178	1
Pollution degree	▪ IEC60664-1	2
Isolation against enclosure	0.75kVdc	
Safety Standards	<ul style="list-style-type: none"> ▪ UL508 (certified E356563) ▪ EN60950 (reference) ▪ EN50178 (reference) 	
EMC Emission	<ul style="list-style-type: none"> ▪ EN55011 (CISPR11) ▪ EN55022 (CISPR22) 	Class A Class A
EMC Immunity	<ul style="list-style-type: none"> ▪ EN61000-4-2 ▪ EN61000-4-3 ▪ EN61000-4-4 ▪ EN61000-4-5 ▪ EN61000-4-11 	Level 3 Level 3 Level 3 Level 1 Level 2
Protection degree	▪ EN60529	IP20
Vibration sinusoidal	▪ IEC 60068-2-6	(5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis (X,Y,Z))
Shock	▪ IEC 60068-2-27	(30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total)
Connection terminals	2.5mm ² , screw type pluggable (24...12AWG)	
Case material	Aluminum	
Weight	0.30kg	
Size (W x H x D)	54.0 x 115.0 x 110.0mm	

1) Start-up type tested: - 40°C, possible at nominal voltage with load deration.

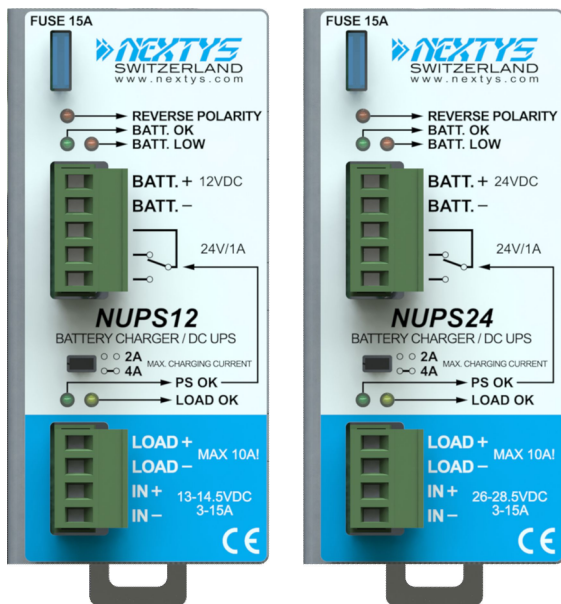
Notes:

- Technical parameters are typical, measured in laboratory environment at 25°C at nominal values, after minimum 5 minutes of operation.
- Power rating, losses, efficiency, ripple, thermal behaviour and start-up may change outside of the nominal rated input range. Contact factory for details.
- Data may change without prior notice in order to improve the product.

DIMENSIONS



CONNECTION



Input / Output Connection:

- IN + = Positive DC (Power Supply)
 - IN - = Negative DC (Power Supply)
 - LOAD + = Positive DC
 - LOAD - = Negative DC
 - BATT.+ = Positive DC (Battery)
 - BATT.- = Negative DC (Battery)
- Signaling: dry contact (SPDT)
- NO
 - NC
 - COM