











### ■ Main Features

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

# **NUPS SERIES**

# **DC/DC DC UPS 12V 24V 10A**



### **TECHNICAL DATA**

Model type	NUP	S12	NUPS24
OUTPUT DATA			
Load nominal voltage	1015Vdc		2028Vdc
Charging current Limit (Settable)	2.0A or 4.0A		
Load maximal current			.0A
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	75% @ 13Vdc 85% @ 13.5Vdc		75% @ 26Vdc 85% @ 27Vdc
vs power supply voltage	100% @ 14Vdc		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	Battery reverse connection Battery short-circuit/overload Battery deep discharge		517101 6 Batt. 123.3740 2 6.27
Status Signals	<ul> <li>PS OK - green LED</li> <li>LOAD OK - amber LED</li> <li>BATT. OK - green LED</li> <li>BATT. LOW - red LED</li> <li>REVERSE POLARITY - red LED</li> <li>Dry contact (SPDT, 24Vdc / 1A)</li> </ul>		
INPUT DATA			
nput DC rated voltage from power supply	1314.5Vdc (UL certified)		2628.5Vdc (UL certified)
Input DC rated current		3	.15A
GENERAL DATA			
Operating temperature <sup>1</sup>	- 40°C+ 70°C UL certified up to 60°C		
Derating	- 0.25A/°C over 60°C		
Storage temperature	- 40°C+ 80°C		
Humidity	595% r.H. non condensing		
Life time expectation	64'000h (7.3 years) at 25°C ambient full load		
	- 5150470		t 23 Campient full load
Overvoltage category Pollution degree	■ EN50178 ■ IEC60664-1	l 2	
Isolation against enclosure			5kVdc
130/4/1011 against Cholosule	UL508 (certified E356563)		
Safety Standards	■ EN60950 ■ EN50178	(reference)	
		(reference)	
EMC Emission	<ul><li>EN55011 (CISPR11)</li><li>EN55022 (CISPR22)</li></ul>	Class A Class A	
	ENSSUEZ (CIST REE)	Level 3	
EMC Immunity	■ EN61000-4-2 ■ EN61000-4-3	Level 3 Level 3	
	■ EN61000-4-3	Level 3	
	■ EN61000-4-5	Level 1	
	■ EN61000-4-11	Level 2	
Protection degree	■ EN60529	IP20	
Vibration sinuosoidal	■ IEC 60068-2-6		0Hz: 2g 2hours / axis (X Y 7)
Shock	■ IEC 60068-2-6 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis (X,Y,Z)  ■ IEC 60068-2-27 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total)		
Connection terminals	2.5mm², screw type pluggable (2412AWG)		
Case material	Aluminum		
Weight		0.3	30kg
Size (W x H x D)		54.0 x 115.	0 x 110.0mm

<sup>1)</sup> Start-up type tested: -  $40^{\circ}$ C, possible at nominal voltage with load deration.

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.

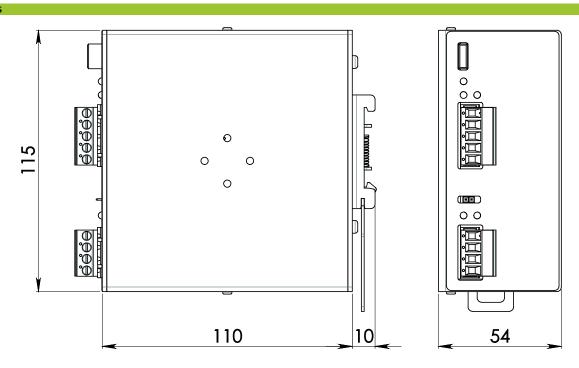
- Data may change without prior notice in order to improve the product.

# **NUPS SERIES**

# **DC/DC DC UPS 12V 24V 10A**



### 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