

















PSH150 is an advanced DIN rail 1-phase input, 150W SMPS (Switched Mode Power Supply) with a distinctive feature: 10kV isolation between primary and secondary.

This allows it to be used in energy management, telecom, renewable energy and other demanding applications.

■ Main Features

- Class II wiring (PE connection not required)
- J 10kVac primary to secondary isolation (suitable for energy management applications)
- Wide output voltage range 5...55Vdc, user settable
- J Auxiliary 12V/100mA power supply
-) High efficiency and compact size
- **J** Digital Power regulation
- User settable current limitation threshold
- Remote ON/OFF or other remote control functions possible through INHIBIT input
- Modbus over USB and RS-485 interfaces for control and monitoring
- J Multiple protections
- Can be paralleled for power or redundancy (integrated ORing circuitry)
- J Up to 50°C operating temperature with no derating
-) Wall mount fixing possible
- J Suitable for **POWERMASTER** software (available for Windows and Android OS)

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TECHNICAL DATA

Section 1998	Model type	PSH150
Section colongs		
Additional procession 12.00		555Vdc
Total Common convent		
Devision limits		
12.5 to 3.0 (depending on void)		
Total conjustion		
Signet & Name	·	
Additional Content	-	
Setter chemistries		
Seat And Color	Hold up time	
Deliver	Battery charger function	C.C. / C.V. (setup via front panel or POWERMASTER application)
Deliver		
Overlations	Battery chemistries	
Thermal protection		
Injust contents		· · · · · · · · · · · · · · · · · · ·
Imput overvoltage protection	Protections	· ·
Durput overwillage protection		
3 Soutus ESP) 3 3 Sout	Output overvoltage protection	≥ 62Vdc
Saints Signals		 7 segment, 3 digits display
MHBBT - Incident ermote		
MHBBT - Incident ermote	S S	3 programming keys
Parallel connection	9	
***DC OK - dry contact (SPPC, 24Vez - IA)	User Interface	12V AUX - Auxiliary 12Vdc / 100mA
Modus over USB and R5-485 interfaces		
Pasallet connection Possible for power and redundancy (integrated ORing circultry)		
Input AC rated voltage	Parallel connection	
Nominit: 120240/vic Range: 902779/cc Rang		rossible for power and redundancy (integrated Offing Circuitiy)
Injust AC rated voltage Range: 902779ac Frequency A7581c Injust AC rated voltage Injust AC rated current Vin = 1209/ac Injust AC rated current Vin = 1409/ac Injus AC rated current Vin = 1409/ac Injust AC rated current Vin = 1409/ac Injus AC rated current Vin = 1409/ac Injus AC rated current Vin = 1409/ac Injus AC rated	INPUT DATA	
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Toput A Craited current	requestey	4763Hz
Vin = 120Vac	Input DC rated voltage	110400Vdc
Vin = 120Vac	Input AC rated current	
Vine 240Vas		2.24
Input DC rated current		
Vin = 110V/dc		1.00
Vin = 400Vdc 0.6A Standby power < 4W	l ·	
Standby power		
Power Factor Correction	Vin = 400Vdc	0.6A
Inrush peak current	Standby power	< 4W
Inrush peak current	Power Factor Correction	Active > 0.9
Touch (leakage) current Fuse 8AT (not user replaceable)		
Internal Protection fuse Recommended external protection Recommended external protection Recommended external protection Recommended external protection Recommended external surge arresters (SPD) according to local regulations. Refliciency See Charts on Fig. 1 Storage temperature* Departing temperature Pundity Recommended to provide external surge arresters (SPD) according to local regulations. Recommended to provide external surge arresters (SPD) according to local regulations. Recommended to provide external surge arresters (SPD) according to local regulations. Recommended external protection See Charts on Fig. 1 Storage temperature Ao'C + 80°C Deparding on Vout and Vin Departing One Vin Department One Vin Departing One Vin	inrush peak current* / I*t	
MCB 6A C curve It is strongly recommended to provide external surge arrestrs (SPD) according to local regulations.	Touch (leakage) current	≤ 0.1mA
It is strongly recommended to provide external surge arresters (SPD) according to local regulations.	Internal Protection fuse	Fuse 8AT (not user replaceable)
It is strongly recommended to provide external surge arresters (SPD) according to local regulations.		MCR 6A C CURVE
### Service	Recommended external protection	
Strict S	CENERAL DATA	it is strongly recommended to provide external surge arresters (at b) according to local regulations.
Dissipated power Operating temperature ¹ Operating temperature ² Depending on Yout and Vin over 50°C See charts on Fig. 1 Storage temperature - 40°C + 80°C Humidity - 5		700 - 000//
Operating temperature	,	
Depending on Vout and Vin over 50°C See charts on Fig. 1		
See charts on Fig. 1 Storage temperature	Operating temperature ³	- 40°C+ 70°C
See charts on Fig.1	B	Depending on Vout and Vin over 50°C
Storage temperature	Derating	· · ·
Humidity	Storage temperature	·
Safety Standards		
MILHDBK-217F		
EN60255-27 IV	Life time expectation	351'777h (40.1 years) at 25°C ambient full load
Pollution degree	MTBF	■ MIL-HDBK-217F > 700'000h at 25°C ambient full load
Pollution degree	Overvoltage category	■ FN60255-27 IV
Input / output isolation		
UL508		
EN60255-27 (reference) EN55011 (CISPR11) Class A EN55022 (CISPR22) Class A EN61000-3-2 Class A EN61000-4-2 Level 4 EN61000-4-3 Level 4 EN61000-4-5 Level 4 EN61000-4-5 Level 2 Protection degree EN6000-4-11 Level 2 Protection sinuosoidal EC60068-2-6 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis (X,Y,Z) Shock EC60068-2-27 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total) IN/OUT Connection terminals Up to 0.5mm², Fast pluggable type (20AWG) RS-485 through RJ45 Female	input / output isolation	
ENSO255-27 (reference) ENSO211 (CISPR11) Class A ENS5012 (CISPR22) Class A EN61000-3-2 Class A EN61000-3-2 Class A EN61000-4-2 Level 4 EN61000-4-3 Level 4 EN61000-4-4 Level 4 EN61000-4-5 Level 4 EN61000-4-11 Level 2 Protection degree EN60529 IP20 Vibration sinuosoidal EC60068-2-6 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis (X,Y,Z) Shock EN60068-2-7 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total) IN/OUT Connection terminals Up to 0.5mm², Fast pluggable (2412AWG) Communication interface connector RS-485 through RJ45 Female	Safety Standards	■ UL508 (reference)
EMC Emission	Jaicty Standards	■ EN60255-27 (reference)
EMC Emission		EN55011 (CISPR11) Class A
EN61000-3-2 Class A	EMC Emission	
EN61000-4-2		
EN61000-4-3		
EMC Immunity EN61000-4-4 EN61000-4-5 EN61000-4-5 EN61000-4-11 Evel 2 Protection degree EN60529 IP20 Vibration sinuosoidal IEC60068-2-6 IEC60068-2-7 Shock IEC60068-2-7 IEC		
Protection degree ■ EN61000-4-5 Level 4 EN61000-4-11 Level 2 Protection degree ■ EN60529 IP20 Vibration sinuosoidal ■ IEC60068-2-6 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis (X,Y,Z) Shock ■ IEC60068-2-27 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total) IN/OUT Connection terminals Auxiliary connection terminals Up to 0.5mm², Fast pluggable (2412AWG) Communication interface connector	ENG Immunity	
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Protection degree EN60529 IP20 Vibration sinuosoidal IEC60068-2-6 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis (X,Y,Z) Shock IEC60068-2-27 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total) IN/OUT Connection terminals 2.5mm², screw type pluggable (2412AWG) Auxiliary connection terminals Up to 0.5mm², Fast pluggable type (20AWG) RS-485 through RJ45 Female		· ·
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IN/OUT Connection terminals 2.5mm², screw type pluggable (2412AWG) Auxiliary connection terminals Up to 0.5mm², Fast pluggable type (20AWG) RS-485 through RJ45 Female		• • • • • • • • • • • • • • • • • • • •
Auxiliary connection terminals Up to 0.5mm², Fast pluggable type (20AWG) RS-485 through RJ45 Female		
Communication interface connector RS-485 through RJ45 Female	IN/OUT Connection terminals	2.5mm², screw type pluggable (2412AWG)
Communication interface connector RS-485 through RJ45 Female	Auxiliary connection terminals	Up to 0.5mm², Fast pluggable type (20AWG)
Communication interface connector	·	
OSD- 1 Type (Viitual Controll)	Communication interface connector	The state of the s
		OSD-B Type (virtual controll)

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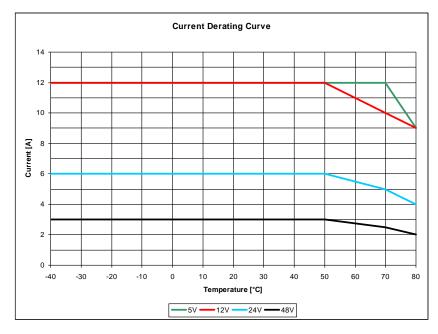


Case material	Plastic, Flame retardant UL94 V-0
Weight	0.75kg
Size (W x H x D)	179.5 x 100.3 x 64.5mm

- 1) Ripple and Noise are measured with 20MHz bandwidth, probe terminated with a 0.1μF MKP parallel capacitor.
- 2) Peak current measured after 0.2ms from main connection; 240Vac/50Hz; Ambient temperature at 25°C; Cold Start.
- 3) Start-up type tested: 40°C, possible at nominal voltage with load deration.

Notes:

- For more details, performance and descriptions regarding all parameters not indicated in the above table, please refer to the user manual downloadable from www.nextys.com
- Technical parameters are typical, measured in laboratory environment at 25°C and 240Vac / 50Hz, 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.

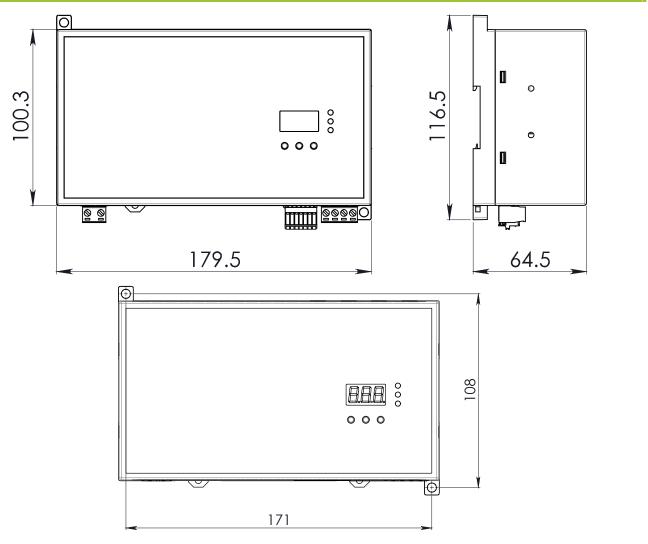




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DIMENSIONS



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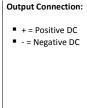


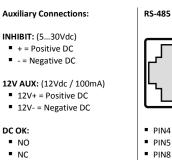
CONNECTION



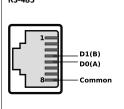
Input Connection: Single phase: ■ L = Line ■ N = Neutral DC: ■ L = + Positive DC

■ N = - Negative DC

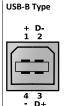




■ COM







- 1 = VBUS (+5V)
- 2 = Data (D-)
- 3 = Data (D+)

■ 4 = GND

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