











- Slim and Low profile (41mm)
- · Fanless and conduction-cooled design
- · Built-in active PFC function
- -30~+70°C working temperature
- · Output voltage and constant current level programmable
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in remote ON-OFF control
- · DC OK active signal
- · Operating altitude up to 5000 meter (Note.7)
- · LED indicator for power on
- Optional PMBus or CANBus protocol
- 5 years warranty











■ Certificates

Safety: UL/EN62368-1EMC: EN55032 / 55024

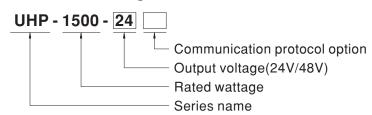
Applications

- · Industrial automation machinery
- · Industrial control system
- · Mechanical and electrical equipment
- Electronic instruments, equipment or apparatus
- · Test and measurement instrument
- · Laser related machine
- · Charging related equipment
- · Household appliances

■ Description

UHP-1500 series is a 1500W single-output slim type power supply with 41mm of low profile design. Adopting the full range $90\sim264$ VAC input, the entire series provides an output voltage line of 24V and 48V. In addition to the high efficiency up to 96%, that the whole series operates from -30° C $\sim 70^{\circ}$ C under air convection without fan. UHP-1500 has the complete protection functions and 5G anti-vibration capability; It is complied with the international safety regulations such as TUV EN62368-1, UL62368-1, and the design refers to EN61558-1 and EN60335-1. UHP-1500 series serves as a high performance power supply solution for various industrial applications.

Model Encoding



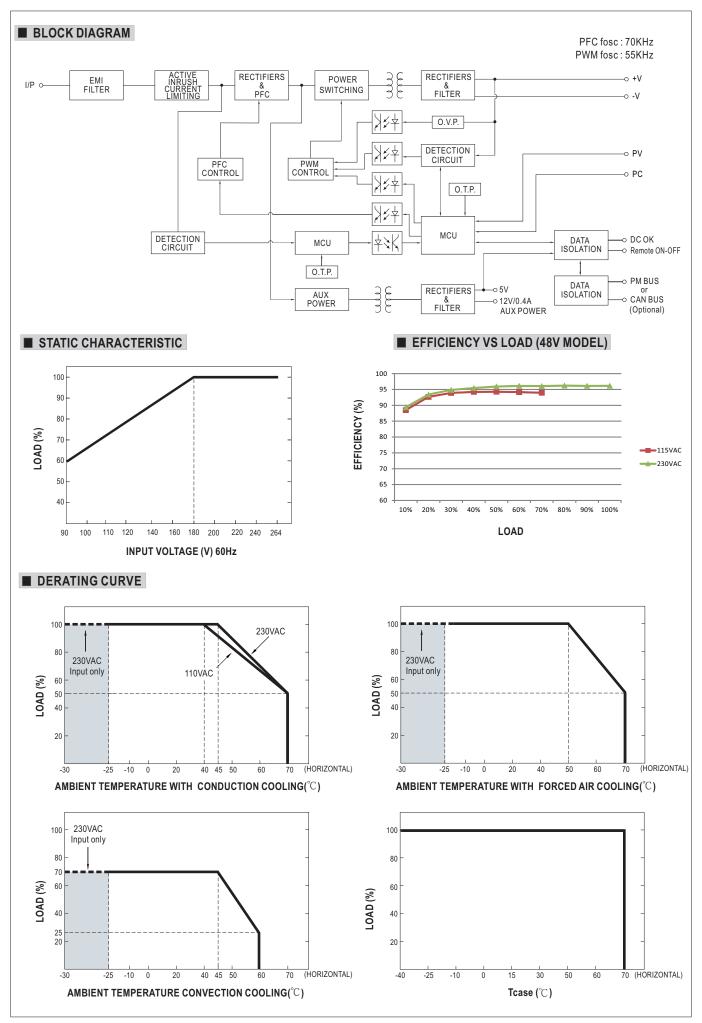
Type	Communication Protocol	Note
Blank	None	In Stock
PM	PMBus protocol	By request
CAN	CANBus protocol	By request



SPECIFICATION

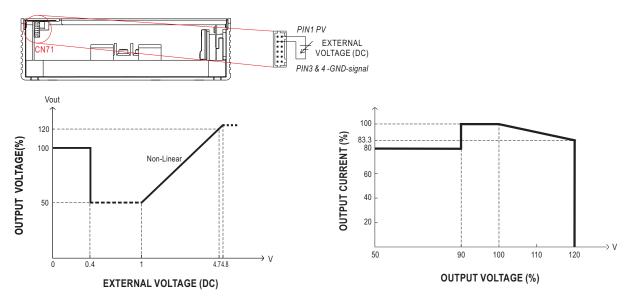
MODEL		UHP-1500-24 UHP-1500-48				
	DC VOLTAGE	VOLTAGE 24V		48V		
	RATED CURRENT	62.5A		31.5A		
	RATED POWER(convection)	1500W		1512W		
	RIPPLE & NOISE (max.) Note.2					
		By built-in potentiometer, SVR				
OUTPUT	VOLTAGE ADJ. RANGE	24~28.8V		48~57.6V		
	VOLTAGE TOLERANCE Note.3	1 1		±1.0%		
	LINE REGULATION					
		±0.5%		±0.5%		
	LOAD REGULATION	±0.5% ±0.5% 1800ms. 60ms/230VAC at full load				
	SETUP, RISE TIME					
	HOLD UP TIME (Typ.)		AC at full load			
	VOLTAGE RANGE Note.4	90 ~ 264VAC 250 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	PF≫0.95/230VAC at full load				
INPUT	EFFICIENCY (Typ.)	95% 96%				
	AC CURRENT (Typ.)	8A/230VAC				
	INRUSH CURRENT (Typ.)	Cold start 60A/230VAC				
	LEAKAGE CURRENT	<0.75mA / 240VAC				
		105~125% rated output power				
	OVERLOAD	Protection type : Constant current limiting,	unit will shutdown after	5 sec_re-power on to	recover	
	SHORT CIRCUIT	Constant current limiting, unit will shutdow		· · · · · · · · · · · · · · · · · · ·		
PROTECTION		30 ~ 35V		60 ~ 67V		
	OVER VOLTAGE	Protection type :Shut down O/P voltage,re-				
	OVER TEMPERATURE	Protection type :Shut down O/P voltage, re		or tomporature goes	down	
		Adjustment of output voltage is allowable			down	
	OUTPUT VOLTAGE PROGRAMMABI F(PV) Note 5	Please refer to the Function Manual.	e to 50 ~ 120% of nomin	iai output voitage		
	OUTPUT CURRENT		lowable to 20 ~ 100% o	of rated current		
FUNCTION	PROGRAMMABLE(PC) Note 5	Adjustment of constant current level is allowable to 20 ~ 100% of rated current. Please refer to the Function Manual.				
	REMOTE ON/OFF CONTROL	Power ON: Short circuit Power OFF: Open circuit				
	AUXILIARY POWER	12V @ 0.4A tolerance ±10%, ripple=150mVp-p				
	DC-OK SIGNAL	The TTL signal out, PSU turn on = 4.4 ~ 5.5V; PSU turn off = -0.5 ~ 0.5V. Please refer to the Function Manual.				
	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing				
ENVIRONMENT	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)				
		10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes				
	VIBRATION					
	SAFETY STANDARDS	UL62368-1,TUV EN62368-1, EAC TP TC 004 approved; Design refers to EN61558-1, EN60335-1(by request)				
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG,O/P-FG:100M Ohms/500V			T (1 1/N)	
	EMC EMISSION	Parameter	Standard		Test Level / Note	
		Conducted	EN55032 (CISPR32)		Class B	
		Radiated	EN55032 (CISPR32)		Class A	
SAFETY &		Harmonic Current	EN61000-3-2		Class A	
EMC		Voltage Flicker	EN61000-3-3			
(Note.6)	EMC IMMUNITY	EN55024 , EN61000-6-2				
		Parameter	Standard		Test Level / Note	
		ESD	EN61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact	
		Radiated	EN61000-4-3		Level 3	
		EFT / Burst	EN61000-4-4		Level 3	
	LING IMMORTT	Surge	EN61000-6-2		2KV/Line-Line 4KV/Line-Earth	
		Conducted	EN61000-4-6		Level 3	
		Magnetic Field	EN61000-4-8		Level 4	
		Voltage Dips and Interruptions	EN61000-4-11		>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods	
MTBF 181.47K hrs min. Telcordia SR-332 (Bellcore); 56.72K hrs min. MIL-HDBK-2		MIL-HDBK-217F				
OTHERS	DIMENSION	290*140*41mm (L*W*H)	,		,	
	PACKING	2.51kg; 6pcs/16.06kg/0.86CUFT				
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance includes set up tolerance, line regulation and load regulation. 4. Derating may be needed under low input voltages. Please check the derating curve for more details. 5. PV/PC functions when users do not use SVR. 6. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).					







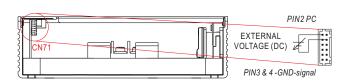
■ FUNCTION MANUAL

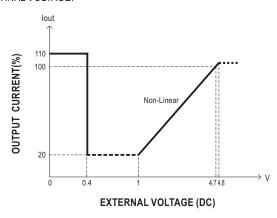


© The rated current should change with the Output Voltage Programming accordingly.

2. Constant Current Programming (or, PC / remote current programming / dynamic current trim)

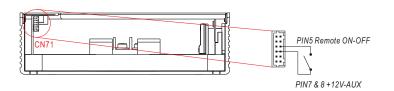
% The output current can be trimmed to 20~100% of the rated current by applying EXTERNAL VOLTAGE.





3.Remote ON-OFF Control

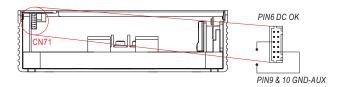
The power supply can be turned ON/OFF individually or along with other units in parallel by using the "Remote ON-OFF" function.



Remote ON-OFF	Power Supply Status	
Short circuit	ON	
Open circuit	OFF	

4.DC-OK Signal

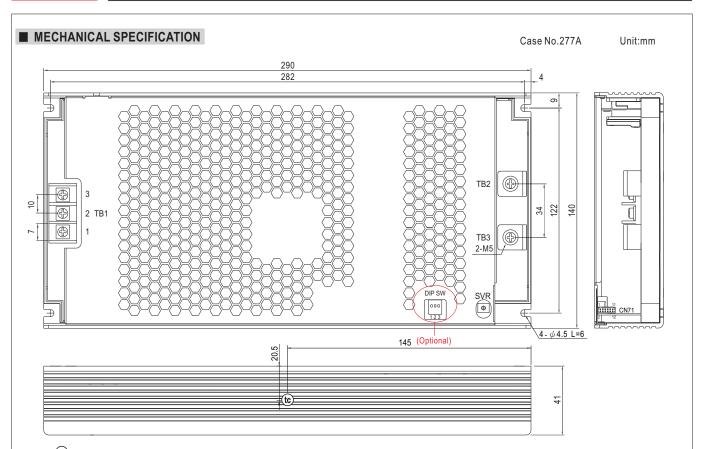
DC-OK signal is a TTL level signal. The maximum sink current is 10mA and the maximum external voltage is 5.6V.



DC-OK signal	Power Supply Status
"High" >4.4~5.5V	ON
"Low" <-0.5~0.5V	OFF

5.PMBus Communication Interface

UHP-1500 supports PMBus Rev. 1.1 with maximum 100KHz bus speed, allowing information reading, status monitoring, output trimming, etc. For details, please refer to the Function Manual.



• (tc) : Max. Case Temperature

AC Input Terminal (TB1) Pin NO. Assignment

Pin No.	Assignment	Terminal	Max mounting torque
1	AC/L		
2	AC/N	DECAT25	18Kgf-cm
3	<u></u>		-

DC Output Terminal (TB2,TB3) Pin NO. Assignment

		, ,,	
Pin No.	Assignment	Terminal	Max mounting torque
TB2	+V	(MW)	
TB3	-V	HS455A	8Kgf-cm

₩DIP SW:

Pin No.	Function	Description
1	A0	
2	A1	PMBus / CANBus interface address switch.
3	A2	

% Control Pin No. Assignment(CN71): HRS DF11-12DP-2DS or equivalent



Mating Housing	HRS DF11-12DS or equivalent	
Terminal	HRS DF11-**SC or equivalent	

Pin No.	Function	Description		
1	PV	Connection for output voltage programming.(Note1)		
2	PC	Connection for constant current level programming.(Note.1)		
3,4	GND (Signal)	Negative output voltage signal.		
5	Remote	The unit can turn the output ON/OFF by dry contact between Remote ON/OFF and 12-AUX.(Note.2)		
5	ON-OFF	Short (10.8 ~ 13.2V): Power ON; Open(0 ~ 0.5V): Power OFF; The maximum input voltage is 13.2V		
		Low (-0.5 ~ 0.5V): When the Vout \leq 80% \pm 6%.		
6	DC-OK	High (4.4 ~ 5.5V) : When Vout≧80%±6%.		
		The maximum sourcing current is 10mA and only for output.(Note.2)		
7,8	+12V-AUX	Auxiliary voltage output, 10.6~13.2V, referenced to GND-AUX (pin3 & 4).		
7,0		The maximum load current is 0.4A. This output is not controlled by "Remote ON-OFF".		
9,10	GND-AUX	Auxiliary voltage output GND.		
9,10		The signal return is isolated from the output terminals (+V & -V).		
11	SDA	For PMBus model: Serial Data used in the PMBus interface. (Note.2)		
	CANH	For CANBus model: Data line used in CANBus interface. (Note.2)		
12	SCL	For PMBus model: Serial Clock used in the PMBus interface. (Note.2)		
12	CANL	For CANBus model: Data line used in CANBus interface. (Note.2)		

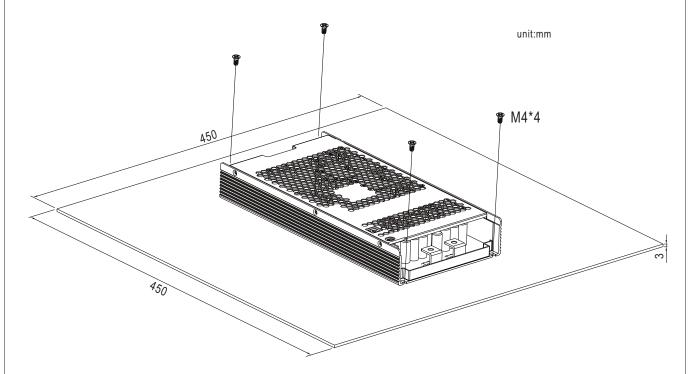
Note1: Non-isolated signal, referenced to [GND(signal)].

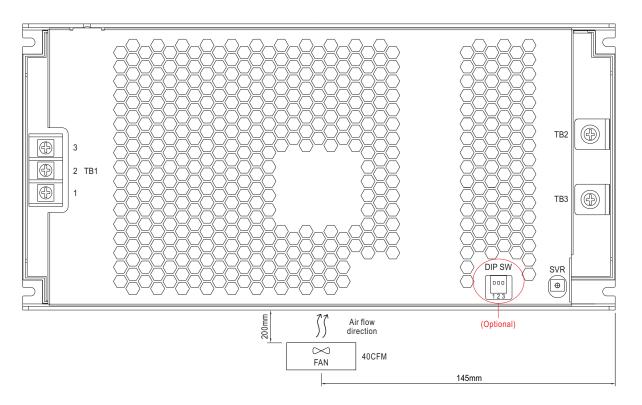
Note2: Isolated signal, referenced to GND-AUX.



Operate with additional aluminum plate

In order to meet the "Derating Curve" and the "Static Characteristics", UHP-1500 series must be installed onto an aluminum plate (or the cabinet of the same size) on the bottom. The size of the suggested aluminum plate is shown as below. And for optimizing thermal performance, the aluminum plate must have an even and smooth surface (or coated with thermal grease), and UHP-1500 series must be firmly mounted at the center of the aluminum plate.





■ INSTALLATION MANUAL

Please refer to: http://www.meanwell.com/manual.html