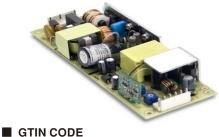


Наличие и актуальные цены на

# **HLP-40H-42**

https://www.mean-well.ru/store/HLP-40H-42/





MW Search: https://www.meanwell.com/serviceGTIN.aspx

#### Features:

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Output constant current level adjustable
- Class 2 power unit
- Three in one dimming function (1~10Vdc or PWM signal or resistance)
- · Suitable for built in LED lighting system
- · Suitable for dry / damp locations
- 100% full load burn-in test
- · 3 years warranty







HLP-40H-12 | HLP-40H-15 | HLP-40H-20 | HLP-40H-24 | HLP-40H-30 | HLP-40H-36 | HLP-40H-42 | HLP-40H-48 | HLP-40H-54





# **SPECIFICATION** MODEL

RATED CURRENT   3.33A   2.67A   2A   1.67A   1.34A   1.12A   0.96A   0.84A   0.75A	WODEL		NLF-40N-12	HLF-40H-13	NLF-40N-20	NLF-40N-24	HLF-40H-30	TLF-40T-30	NLF-40N-42	TLF-40T-40	HLF-40H-34				
RATED CURRENT   3.33A   2.87A   2A   1.87A   1.34A   1.12A   0.99A   0.84A   0.75A		DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V				
RATED POWER   AUN		CONSTANT CURRENT REGION Note.4	7.2 ~12V	9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V				
RIPPLE & NOISE (max.)   Note.2   150mVp-p   150mVp-p   150mVp-p   120mVp-p   200mVp-p   300mVp-p   300mVp-p   300mVp-p   300mVp-p   44 - 53V		RATED CURRENT	3.33A	2.67A	2A	1.67A	1.34A	1.12A	0.96A	0.84A	0.75A				
VOLTAGE ADJ. RANGE   Current ADJ. RANGE   Can be adjusted by internal potentiometer		RATED POWER	40W	40W	40W	40.1W	40.2W	40.3W	40.3W	40.3W	40.5W				
Current ADJ. RANGE   Can be adjusted by internal potentiometer   CURRENT ADJ. RANGE   Can be adjusted by internal potentiometer   CURRENT ADJ. RANGE   Can be adjusted by internal potentiometer   CURRENT CAN BE   CONTINUE   CONTIN		RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	300mVp-p	300mVp-p	300mVp-p				
CURRENT ADJ. RANGE		VOLTAGE ADJ. RANGE	10.8 ~ 13.5V	13.5 ~ 17V	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	40 ~ 46V	44 ~ 53V	49 ~ 58V				
VOLTAGE TOLERANCE Notes.3 ± 2.5% ± 2.0% ± 1.0% ± 0.5% ± 0.	OUTPUT	AUDDENT AD L DANGE													
LINE REGULATION		CURRENT ADJ. RANGE	2 ~ 3.33A	1.6 ~ 2.67A	1.2 ~ 2A	1 ~ 1.67A	0.8 ~ 1.34A	0.67 ~ 1.12A	0.58 ~ 0.96A	0.5 ~ 0.84A	0.45 ~ 0.75				
LOAD REGULATION		VOLTAGE TOLERANCE Note.3	±2.5%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%				
SETUP, RISE TIME		LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%				
HOLD UP TIME (Typ.)		LOAD REGULATION	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%				
VOLTAGE RANGE		SETUP, RISE TIME Note.6	500ms, 80ms	00ms, 80ms at full load 230VAC / 115VAC											
PROUBLY RANGE   47 - 63Hz   PP-0.98/115VAC, PP-0.95/230VAC, PP-0.92/277VAC at full load (Please refer to "Power Factor Characteristic" curve)		HOLD UP TIME (Typ.)	16ms/230VA	16ms/230VAC 16ms/115VAC at full load											
PROUBLY RANGE   47 - 63Hz   PP-0.98/115VAC, PP-0.95/230VAC, PP-0.92/277VAC at full load (Please refer to "Power Factor Characteristic" curve)		, , , ,	90 ~ 305VAC												
POWER FACTOR (Typ.)   PF>0.98/115VAC, PF>0.95/230VAC, PF>0.92/27TVAC at full load (Please refer to "Power Factor Characteristic" curve															
TOTAL HARMONIC DISTORTION		POWER FACTOR (Tvp.)													
EFFICIENCY (Typ.)   87%   87%   88%   88%   88.5%   89%   89%   89.5					•										
AC CURRENT (Typ.)	INPUT					1	· ·				89.5%				
INRUSH CURRENT[Typ.)   COLD START 50A(twidth=210) <sub>IS</sub> measured at 50% (peak) at 230VAC															
MAX. No. of PSUs on 16A   CIRCUIT BREAKER   LEAKAGE CURRENT   CO. 75mA / 277VAC		1.1.7													
OVER CURRENT   Note   14   95 × 108%		MAX. No. of PSUs on 16A													
OVER CURRENT   Note.4   Protection type : Constant current limiting, recovers automatically after fault condition is removed		LEAKAGE CURRENT	<0.75mA / 277VAC												
Protection type : Constant current limiting, recovers automatically after fault condition is removed			95 ~ 108%												
SHORT CIRCUIT		OVER CURRENT Note.4													
15 ~ 21V   18 ~ 24V   23 ~ 30V   28 ~ 35V   35 ~ 43V   41 ~ 49V   48 ~ 58V   54 ~ 65V   59 ~ 68V		SHORT CIRCUIT													
OVER VOLTAGE         Protection type : Shut down o/p voltage, re-power on to recover           OVER TEMPERATURE         Shut down o/p voltage, re-power on to recover           WORKING TEMP.         -40 ~ +70°C (Refer to "Derating Curve")           WORKING HUMIDITY         20 ~ 95% RH non-condensing           STORAGE TEMP., HUMIDITY         -40 ~ +80°C, 10 ~ 95% RH           TEMP. COEFFICIENT         ±0.03%/°C (0 ~ 50°C)           VIBRATION         10 ~ 500Hz, 2G 12min/1cycle, period for 72min. each along X, Y, Z axes           SAFETY STANDARDS         UL8750, CSA C22.2 No. 250.0-08 (except for 48V, 54V), BS EN/EN61347-1, BS EN/EN61347-2-13, EAC TP TC 004 approved; design refer to UL60950-1, BS EN/EN60335-1           WITHSTAND VOLTAGE         I/P-O/P:3.75KVAC         I/P-FG:2KVAC         O/P-FG:0.5KVAC           EMC         ISOLATION RESISTANCE         I/P-O/P; I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/70% RH           EMC EMISSION         Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (≥60% load); BS EN/EN61000-3-3, EAC TP TC 020           EMC IMMUNITY         Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, BS EN/EN55024, light industry level (surge 4KV), EAC TP TC 020           OTHERS         DIMENSION         147*53*27mm (L*W*H)	PROTECTION		•					41 ~ 49V	48 ~ 58V	54 ~ 65V	59 ~ 68V				
OVER TEMPERATURE   Shut down o/p voltage, re-power on to recover			Protection typ	e : Shut down	o/p voltage, re	-power on to re	cover								
WORKING TEMP.		OVER TEMPERATURE													
WORKING HUMIDITY   20 ~ 95% RH non-condensing															
ENVIRONMENT    STORAGE TEMP., HUMIDITY   40 ~ +80°C, 10 ~ 95% RH     TEMP. COEFFICIENT   ±0.03%/°C (0 ~ 50°C)     VIBRATION   10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes     UL8750, CSA C22.2 No. 250.0-08 (except for 48V, 54V), BS EN/EN61347-1, BS EN/EN61347-2-13, EAC TP TC 004 approved; design refer to UL60950-1, BS EN/EN60335-1     WITHSTAND VOLTAGE   I/P-O/P:3.75KVAC   I/P-FG:2KVAC   O/P-FG:0.5KVAC     ISOLATION RESISTANCE   I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH     EMC EMISSION   Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (≥60% load); BS EN/EN61000-3-3, EAC TP TC 020     EMC IMMUNITY   Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, BS EN/EN55024, light industry level (surge 4KV), EAC TP TC 020     MTBF   3132.4K hrs min. Telcordia SR-332(Bellcore); 287.9K hrs min. MIL-HDBK-217F (25°C)     DIMENSION   147*53*27mm (L*W*H)															
TEMP. COEFFICIENT	ENVIRONMENT.		· ·												
VIBRATION         10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes           SAFETY STANDARDS         UL8750, CSA C22.2 No. 250.0-08 (except for 48V, 54V), BS EN/EN61347-1, BS EN/EN61347-2-13, EAC TP TC 004 approved; design refer to UL60950-1, BS EN/EN60335-1           WITHSTAND VOLTAGE         I/P-O/P:3.75KVAC         I/P-FG:2KVAC         O/P-FG:0.5KVAC           EMC         ISOLATION RESISTANCE         I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH           EMC EMISSION         Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (≥60% load); BS EN/EN61000-3-3, EAC TP TC 020           EMC IMMUNITY         Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, BS EN/EN55024, light industry level (surge 4KV), EAC TP TC 020           MTBF         3132.4K hrs min. Telcordia SR-332(Bellcore); 287.9K hrs min. MIL-HDBK-217F (25°C)           OTHERS         DIMENSION         147*53*27mm (L*W*H)	LITTINONIILITT	·	'												
SAFETY STANDARDS															
SAFETY STANDARDS         EAC TP TC 004 approved; design refer to UL60950-1, BS EN/EN60335-1           SAFETY & WITHSTAND VOLTAGE         I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC           I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH           EMC EMISSION         Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (≥60% load); BS EN/EN61000-3-3, EAC TP TC 020           EMC IMMUNITY         Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, BS EN/EN55024, light industry level (surge 4KV), EAC TP TC 020           MTBF         3132.4K hrs min. Telcordia SR-332(Bellcore); 287.9K hrs min. MIL-HDBK-217F (25°C)           OTHERS         DIMENSION         147*53*27mm (L*W*H)		VIDICATION													
ISOLATION RESISTANCE		SAFETY STANDARDS													
EMC EMISSION         Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (≥60% load); BS EN/EN61000-3-3, EAC TP TC 020           EMC IMMUNITY         Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, BS EN/EN55024, light industry level (surge 4KV), EAC TP TC 020           MTBF         3132.4K hrs min. Telcordia SR-332(Bellcore); 287.9K hrs min. MIL-HDBK-217F (25°C)           OTHERS         DIMENSION	SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75	KVAC I/P-F	G:2KVAC O	/P-FG:0.5KVA	С								
EAC TP TC 020	EMC	ISOLATION RESISTANCE													
### ### ### ### #### #### ############		EMC EMISSION	Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (≧60% load) ; BS EN/EN61000-3-3,												
OTHERS         DIMENSION         147*53*27mm (L*W*H)		EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, BS EN/EN55024, light industry level (surge 4KV),												
	OTHERS	MTBF	3132.4K hrs n	nin. Telcord	ia SR-332(Bell	core); 287.9K	hrs min. MIL	-HDBK-217F (	25°ℂ)						
		DIMENSION													
		PACKING		,	JFT										

#### NOTE

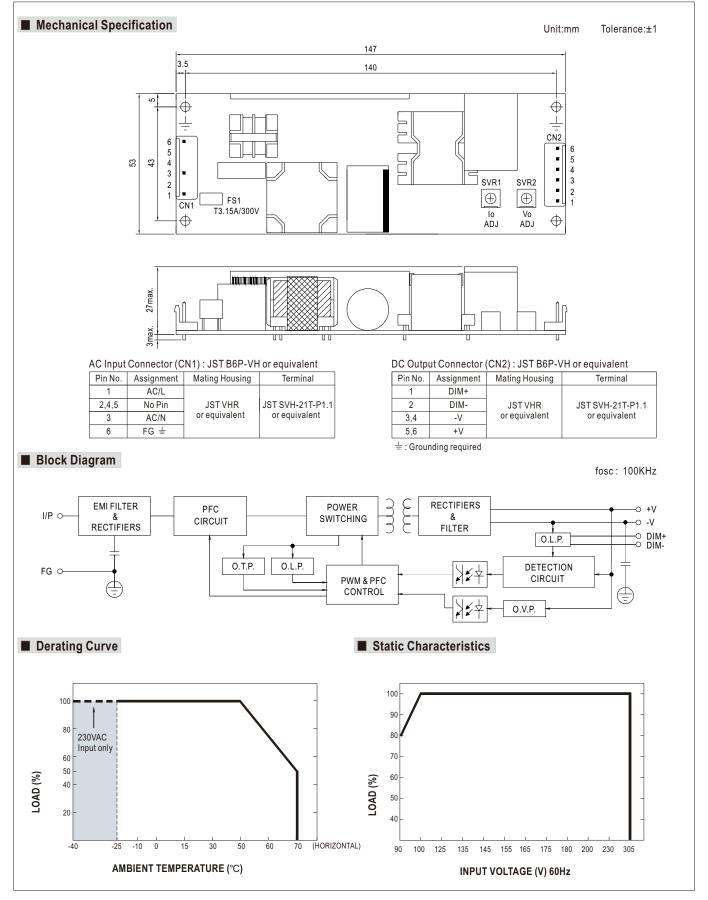
- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.

- 3. Tolerance: includes set up tolerance, line regulation and load regulation.

  4. Please refer to "DRIVING METHODS OF LED MODULE".

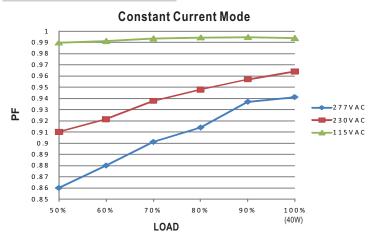
  5. Derating may be needed under low input voltages. Please check the static characteristics for more details.
- 6. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
- 7. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm\*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 https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)
- 8. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.
  9. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains. X Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx





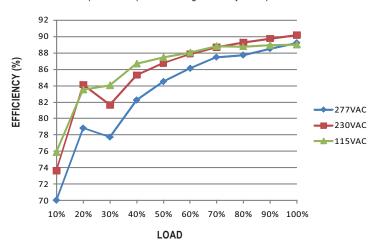


## ■ Power Factor Characteristic



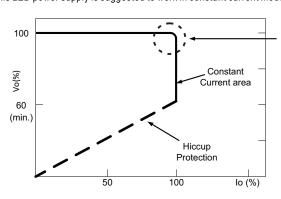
## ■ EFFICIENCY vs LOAD (48V Model)

HLP-40H series possess superior working efficiency that up to 89.5% can be reached in field applications.



#### ■ DRIVING METHODS OF LED MODULE

This LED power supply is suggested to work in constant current mode area (CC) to drive the LEDs.



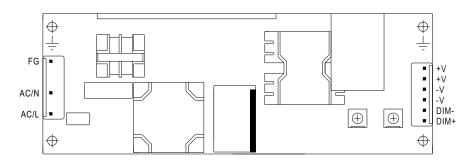
Typical LED power supply I-V curve

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.



## ■ DIMMING OPERATION



- Output constant current level can be adjusted through output connector by 1~10VDC, PWM signal, or connecting a resistance between DIM+ and DIM-.
- \* Please DO NOT connect "DIM-" to "-V".
- \* Reference resistance value for output current adjustment (Typical)

Resistance	Single driver	10ΚΩ	20ΚΩ	30ΚΩ	40ΚΩ	50ΚΩ	60ΚΩ	70ΚΩ	80ΚΩ	90ΚΩ	100ΚΩ	OPEN
value	Multiple drivers (N=driver quantity for synchronized dimming operation)	10KΩ/N	20ΚΩ/Ν	30KΩ/N	40KΩ/N	50KΩ/N	60KΩ/N	70KΩ/N	80KΩ/N	90KΩ/N	100KΩ/N	
Percentage	e of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

#### ¾ 1 ~ 10V dimming function for output current adjustment (Typical)

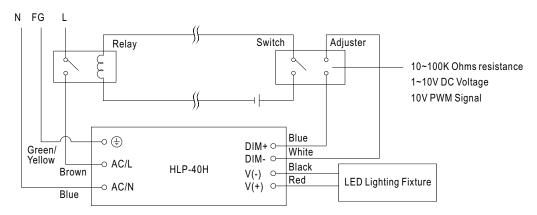
Dimming value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

# % 10V PWM signal for output current adjustment (Typical): Frequency range :100Hz $\sim$ 3KHz

•		-									
Duty value	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

\*\*Wusing the built-in dimming function can't turn the lighting fixture totally dark. Please refer to the connection method below to achieve 0% brightness of the lighting fixture connecting to the LED power supply unit.

Dimming connection diagram for turning the lighting fixture  $\mbox{ON/OFF}$  :



Using a switch and relay can turn ON/OFF the lighting fixture.

- 1. Output constant current level can be adjusted through output connector by connecting a resistance or 1~10Vdc or 10V PWM signal between DIM+ and DIM-.
- 2. The LED lighting fixture can be turned ON/OFF by the switch.