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Электронные компоненты, радиодетали

Каталог Mean Well 2020г. МИНСК

источник, тока, напряжения, каталог, описание, технические, характеристики, datasheet, параметры, маркировка, габариты, фото, даташит, Блок, питания, MW, MEAN WELL,

О компании MEAN WELL

Компания MEAN WELL Enterprises Co., Ltd. образована в 1982 году. В настоящее время MEAN WELL является одним из крупнейших тайваньских производителей источников питания.

Номенклатура изделий фирмы включает несколько тысяч наименований источников питания AC/DC, конверторов DC/DC и инверторов DC/AC,

производимых на заводах в КНР и на Тайване. Продукция компании характеризуется высоким качеством, конкурентоспособными ценами и широтой номенклатуры.

Особенно хорошо представлена номенклатура источников питания AC/DC. Это промышленные источники питания в открытом и закрытом исполнениях для встраивания в промышленную аппаратуру различного назначения, источники питания типа «desk top» и «wall mount», выполненные в виде законченных внешних устройств питания ноутбуков и другой бытовой и промышленной техники, лабораторные источники питания и др.

Продукция MEAN WELL соответствует международным стандартам по электромагнитной совместимости и электробезопасности, что подтверждено сертификатами UL, cUL, CSA, TUV, CE.

Система менеджмента качества компании соответствует стандарту ISO 9001.

Компания MEAN WELL специализируется исключительно на разработке и производстве готовых источников питания.

Она выпускает:

сетевые источники питания в корпусе для монтажа на шасси мощностью от 15 Вт до 8 кВт;

открытые источники питания для монтажа на шасси мощностью от 5 до 250 Вт;

источники питания для монтажа на печатную плату мощностью от 5 до 20 Вт;

источники питания на DIN-рейку мощностью от 20 до 960 Вт;

полузаказные конфигурируемые клиентом источники питания мощностью 450-1000 Вт;

сетевые адаптеры питания мощностью от 5 до 120 Вт;

зарядные устройства мощностью от 108 до 360 Вт;

DC/DC-преобразователи для монтажа на печатную плату мощностью от 0,5 до 30 Вт;

DC/DC-преобразователи для монтажа на шасси от 5 до 350 Вт;

DC/AC-инверторы мощностью от 150 до 2400 Вт.



Your Reliable Power Partner



High Performance & Slim Design

Sign Panel Power Supply

150W~500W AC/DC LED Display Switching Power Supplies



Company Profile

Established in 1982, MEAN WELL is a leading standard switching power supply manufacturers in the world. MEAN WELL currently operates under five financially independent but cooperating companies in Taiwan, China, USA and Europe and three factories in Taiwan, GuangZhou and SuZhou. The product lines include AC/DC switching power supplies, DC/DC converters, waterproof LED power supplies, adaptors, DC/AC inverters and battery chargers. We have over 9,000 standard models widely used in medical, automation, communication, LED lighting, moving sign, and office automation fields.

With more than 30 years of experience, our products have been widely applied to LED moving sign panel due to its high reliability and the best C/P value, and have received outstanding customers' feedback and market shares. These years, MEAN WELL dedicates to the development of green energy-saving products.

MEAN WELL USA



MEAN WELL EUROPE



With our talented R&D team' s efforts, the new generation 150~500W LED display power solution have successfully launched into markets. The ultra-low profile design that allows the height and weight of the sign module to be lowered greatly simplifies the delivery and installation process. Accounting for high efficiency and energy saving, the whole series effectively achieves electricity reduction. Various models with single output or dual outputs are provided for selection, and comply with the international regulation such as UL, CUL, TUV, CCC, CB and CE. MEAN WELL LED display power solution is suitable for indoor/outdoor LED electronic signage, moving sign, small pixel pitch LED display, LED channel letter, LED TV wall and others.

With more than 30 years of experience in R&D and production of standard power supplies, MEAN WELL has ten product category covering 9,000 models, to provide "One Stop Shopping" power solutions. Every product in the MEAN WELL range is the result of rigid procedures governing design, design verification test (DVT), design quality test (DQT), component selection, pilot-run production, and mass production. With more than 200 distributors globally, the MEAN WELL products are distributed to over 70 countries worldwide. The small size orders can expect delivery within 24 hours without MOQ requirement. If you are looking for switching power supply with high reliability, good quality, reasonable price and full series products which can satisfy your various demands, MEAN WELL, a total solution provider, is definitely your first choice!

MEAN WELL SUZHOU



MEAN WELL TAIWAN



TIANHE R&D CENTER



MEAN WELL GUANGZHOU INDUSTRIAL PARK



Reliable Quality

The brand name "MEAN WELL" is defined as "have good intentions". We strongly believe that the product quality is the life of power supply manufacturer. "To become the reliable power partner" has been the motivation for MEAN WELL to grow continuously.

In 1994, MEAN WELL acquired the ISO9001 certification and began to implement the total quality management (TQM) system, which are audited by TUV annually to continuous review and improvement. In April 2013, MEAN WELL acquired the ISO14000 certification and obtained the OHSAS18001 system (ESH, environmental safety and health) in 2015, to take the concept of environmental protection into action, and expect to create a safe and healthy life.



OHSAS18001



ISO9001



ISO14000

MEAN WELL LED display power supply products comply with UL / CUL / CCC / TUV / CB / CE / CQC certificates, including UL60950-1, TUV EN60950-1, IEC 60950-1, EN55011, EN55032, GB4943.





MEAN WELL has a complete quality management system. To ensure product quality, 100% burn-in test, function test and pressure test have been applied in manufacturing process, while the MIL-105E sampling method used in IQC, PCBQC (semi-finished products testing) and FQC phases. In the R&D stage, MEAN WELL quality engineers customize the "Test Plan" for each product, to complete the verifications of DFMEA, DVT/DQT, ORT, EMC, drop test, vibration test, thermal shock test, and reliability test.

In production stage, the product engineers co-work with process engineers to review the pilot run, semi-finished products quality control, process checking, finished product quality control, and the feedback analysis as well as the production problems occurred.



Selection Guide

Family		PFC		Input Range	Output		Fan		Remote ON/OFF		Remote Sense	Effi.	Dimension (Lx Wx H)	Moistureproof		Warranty (yrs)	Page
Series	Model No.	Yes	No		Single	Dual	Yes	No	Yes	No				Yes	No		
UHP	UHP-200A	●		90~264VAC	●			●		●		88.5%	167X55X26mm	semi-potted		3	6
	UHP-200	●			●			●		●		94%	194x55x26mm				
	UHP-350	●		90~264VAC	●			●		●		95%	220x62x31mm				
	UHP-500	●			●			●		●		95%	233x81x31mm				
HSP	HSP-150	●		90~264VAC	●			●		●	●	90%	220x62x32mm	●		3	7
	HSP-200	●			●			●		●		88%	210x62x31mm	●			
	HSP-300	●		180~264VAC or 90~135VAC	●			●		●		87%	210x81x31mm	●			
RSP	RSP-150	●		90~264VAC	●			●	●			87%	199x99x30mm	option		3	8
	RSP-200	●				●			●		85.5%	215x115x30mm					
	RSP-320	●				●		●		●		83%					
	RSP-500	●				●			●		84%	230x127x40.5mm					
LRS	LRS-150		●	115VAC/230VAC (selected by switch)	●			●		●		90%	159x97x30mm	option		3	9
	LRS-150F		●	85~264VAC	●			●		●		90%					
	LRS-200		●	115VAC/230VAC (selected by switch)	●			●		●		87%	215x115x30mm	option		3	
	LRS-350		●			●		●		83.5%							
	LRS-200E		●	180~264VAC	●			●		●		80%		option	1		
	LRS-300E		●			●			●								
LHP	LHP-200	●		90~264VAC	●			●		●		90%	220x50x26mm		●	3	10
HDP	HDP-190	●		90~264VAC		●		●		●		86%	215x115x36mm	●		3	10
	HDP-240	●				●	●			●		84%		●			
HSN	HSN-200		●	180~264VAC or 90~135VAC	●			●		●		88%	210x62x31mm	●		2	11
	HSN-300		●			●			●		●		86%	210x81x31mm			
NEL	NEL-400		●	180~264VAC	●		●			●		84%	215x115x30mm	●		2	11
ERP	ERP-350		●	180~264VAC	●			●		●		90%	220.4x130x48mm	●		3	12
ERPF	ERPF-400	●		90~264VAC	●			●		●		91%	220.4x130x48mm	●		3	12

UHP Series

200~500W Single Output

Features

- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds (90~264VAC)
- Low profile(26~31mm)
- Built-in active PFC function ; $PF \geq 0.95$
- 150% peak load capability(100ms)
- Fanless design, cooling by free air convection
- Working temperature (please refer to derating curve) : -30~70°C
- Protections : Short circuit / Overload / Over voltage / Over temperature
- Operating altitude up to 5000 meter
- LED indicator for power on
- Multiple models for choice
Blank-Type: Enclosed upper case
R-Type: Built-in DC OK signal and redundant function
- 3 years warranty



▲ UHP-200A
L167x W55x H26mm



▲ UHP-200□
L194x W55x H26mm



▲ UHP-350□
L220x W62x H31mm



▲ UHP-500□
L233x W81x H31mm

■ UHP-200A Series

Model No.	Output	Vo Adj.	R & N	Effi.
UHP-200A-4.2	4.2V, 0~40A	4.0~4.4V	200mV	88%
UHP-200A-4.5	4.5V, 0~40A	4.3~4.7V	200mV	88%
UHP-200A-5	5V, 0~40A	4.7~5.3V	200mV	88.5%

■ UHP-200 Series

Model No.	Output	Vo Adj.	R & N	Effi.
UHP-200□-3.3	3.3V, 0~40A	3.2~3.5V	150mV	89%
UHP-200□-4.2	4.2V, 0~40A	3.6~4.4V	150mV	90%
UHP-200□-5	5V, 0~40A	4.5~5.5V	200mV	91%
UHP-200□-12	12V, 0~16.7A	11.4~12.6V	240mV	93%
UHP-200□-15	15V, 0~13.4A	14.3~15.8V	240mV	94%
UHP-200□-24	24V, 0~8.4A	22.8~25.2V	240mV	94%
UHP-200□-36	36V, 0~5.6A	34.2~37.8V	240mV	94%
UHP-200□-48	48V, 0~4.2A	45.6~50.4V	300mV	94%

□ = Blank-Type or R-Type

■ UHP-350 Series

Model No.	Output	Vo Adj.	R & N	Effi.
UHP-350□-3.3	3.3V, 0~60A	3.2~3.5V	150mV	88.5%
UHP-350□-4.2	4.2V, 0~60A	3.6~4.4V	150mV	89%
UHP-350□-5	5V, 0~60A	4.5~5.5V	200mV	90%
UHP-350□-12	12V, 0~29.2A	11.4~12.6V	200mV	91%
UHP-350□-15	15V, 0~23.4A	14.3~15.8V	200mV	92%
UHP-350□-24	24V, 0~14.6A	22.8~25.2V	240mV	94%
UHP-350□-36	36V, 0~9.75A	34.2~37.8V	240mV	94%
UHP-350□-48	48V, 0~7.3A	45.6~50.4V	240mV	94%

□ = Blank-Type or R-Type

■ UHP-500 Series

Model No.	Output	Vo Adj.	R & N	Effi.
UHP-500□-4.2	4.2V, 0~90A	3.6~4.4V	100mV	89%
UHP-500□-5	5V, 0~90A	4.5~5.5V	100mV	90%
UHP-500□-12	12V, 0~41.7A	11.4~12.6V	120mV	92%
UHP-500□-15	15V, 0~33.4A	14.3~15.8V	150mV	92%
UHP-500□-24	24V, 0~20.9A	22.8~25.2V	150mV	94%
UHP-500□-36	36V, 0~13.9A	34.2~37.8V	240mV	94%
UHP-500□-48	48V, 0~10.45A	45.6~50.4V	240mV	95%

□ = Blank-Type or R-Type

HSP Series

150~300W Single Output

Features

- Universal AC input / Full range
(HSP-300: 180~264VAC or 90~135VAC)
- Withstand 300VAC surge input for 5 seconds
(HSP-150/200/300)
- Slim design, low profile
- Built-in active PFC function ; $PF \geq 0.95$
- Conformal coated (Semi-potted for HSP-300E)
- Protections: Short circuit / Overload /
Over voltage / Over temperature
- Fanless, cooling by free air convection(HSP-150/200/300)
- Working temperature
(please refer to derating curve) : $-30 \sim +70^{\circ}\text{C}$
- LED indicator for power on
- ZVS technology to reduce power dissipation(HSP-150)
- High efficiency / Slim design / Low voltage output
- HSP-150 :
Cooling by free air convection(150W) ;
With fan and heat sink, 40A output(200W)
- Low leakage current :
<0.4mA/240VAC(HSP-150); <1mA/240VAC(HSP-200/300)
- Multiple models for choice (HSP-300 Series) :
Blank-Type: No conformal coated
E-Type: Optional, semi-potted
- 3 years warranty



▲ HSP-150
L220x W62x H32mm



▲ HSP-200
L210x W62x H31mm



▲ HSP-300
L210x W81x H31mm

■ HSP-150 Series



Model No.	Output	Vo Adj.	R & N	Effi.
HSP-150-2.5	2.5V, 0~30A / 40A	2.35~2.75V	80mV	86%
HSP-150-3.8	3.8V, 0~30A / 40A	3.4~4.2V	100mV	88%
HSP-150-5	5V, 0~30A / 40A	4.5~5.5V	100mV	90%

■ HSP-200 Series



Model No.	Output	Vo Adj.	R & N	Effi.
HSP-200-4.2	4.2V, 0~40A	3.6~4.4V	150mV	88%
HSP-200-5	5V, 0~40A	4.5~5.5V	150mV	88.5%

■ HSP-300 Series



Model No.	Output	Vo Adj.	R & N	Effi.
HSP-300□-2.8	2.8V, 0~60A	2.5~3.0V	110mV	80%
HSP-300□-4.2	4.2V, 0~60A	3.6~4.4V	150mV	85%
HSP-300□-5	5V, 0~60A	4.5~5.5V	150mV	87%

□=Blank-Type or R-Type

RSP Series

150~500W Single Output

Features

- Universal AC input / Full range
- 1U low profile
- High efficiency
- Built-in active PFC function ; PF>0.95
- Protections : Short circuit / Overload / Over voltage / Over temperature
- Working temperature (please refer to derating curve) : -30~+70°C
- Fanless design, cooling by free air convection (RSP-150/200)
- Forced air cooling by built-in DC Fan (RSP-320/500)
- Optional conformal coated
- LED indicator for power on
- 3 years warranty



▲ RSP-150
L199x W99x H30mm



▲ RSP-200
L215x W115x H30mm



▲ RSP-320
L215x W115x H30mm



▲ RSP-500
L230x W127x H40.5mm

■ RSP-150 Series



Model No.	Output	Vo Adj.	R & N	Effi.
RSP-150-3.3	3.3V, 0~30A	3.14~3.63V	100mV	81.5%
RSP-150-5	5V, 0~30A	4.75~5.5V	100mV	87.0%

■ RSP-320 Series



Model No.	Output	Vo Adj.	R & N	Effi.
RSP-320-2.5	2.5V, 0~60A	2.35~2.85V	100mV	75.5%
RSP-320-3.3	3.3V, 0~60A	2.97~3.8V	100mV	79.5%
RSP-320-4	4V, 0~60A	3.7~4.3V	100mV	81.0%
RSP-320-5	5V, 0~60A	4.5~5.5V	150mV	83.0%

■ RSP-200 Series



Model No.	Output	Vo Adj.	R & N	Effi.
RSP-200-2.5	2.5V, 0~40A	2.35~2.85V	100mV	79.5%
RSP-200-3.3	3.3V, 0~40A	2.97~3.8V	100mV	81.5%
RSP-200-4	4V, 0~40A	3.7~4.3V	100mV	84.0%
RSP-200-5	5V, 0~40A	4.5~5.5V	150mV	85.5%

■ RSP-500 Series



Model No.	Output	Vo Adj.	R & N	Effi.
RSP-500-3.3	3.3V, 0~90A	2.8~3.6V	120mV	81.0%
RSP-500-4	4V, 0~90A	3.6~4.3V	120mV	83.0%
RSP-500-5	5V, 0~90A	4.5~5.5V	150mV	84.0%

LRS Series

150~350W Single Output

Features

- AC input range:
115/230VAC selected by switch (LRS-150/200/350);
85~264VAC input (LRS-150F)
180~264VAC input (LRS-200E/300E)
- **Withstand 300VAC surge in/out for 5 seconds**
- Cooling by free air convection (LRS-200/LRS-200E)
- 1U low profile : 30mm
- **Withstand 5G vibration test**
- No load power consumption < 0.75W
- Working temperature
(please refer to derating curve) : -25~+70°C
- LED indicator for power on
- 3 years warranty



▲ LRS-150
L159x W97x H30mm



▲ LRS-150F
L215x W115x H30mm



▲ LRS-200
L215x W115x H30mm



▲ LRS-350
L215x W115x H30mm

■ LRS-150 Series



Model No.	Output	Vo Adj.	R & N	Effi.
LRS-150-12	12V, 0~12.5A	10.2~13.8V	150mV	87.5%
LRS-150-15	15V, 0~10A	13.5~18V	150mV	88.5%
LRS-150-24	24V, 0~6.5A	21.6~28.8V	200mV	89.0%
LRS-150-36	36V, 0~4.3A	32.4~39.6V	200mV	89.0%
LRS-150-48	48V, 0~3.3A	43.2~52.8V	200mV	90.0%

■ LRS-150F Series



Model No.	Output	Vo Adj.	R & N	Effi.
LRS-150F-5	5V, 0~22A	4.5~5.5V	100mV	85.0%
LRS-150F-12	12V, 0~12.5A	10.2~13.8V	150mV	87.5%
LRS-150F-15	15V, 0~10A	13.5~18V	150mV	89.0%
LRS-150F-24	24V, 0~6.5A	21.6~28.8V	200mV	89.0%
LRS-150F-36	36V, 0~4.3A	32.4~39.6V	200mV	89.0%
LRS-150F-48	48V, 0~3.3A	43.2~52.8V	200mV	90.0%

■ LRS-200 Series



Model No.	Output	Vo Adj.	R & N	Effi.
LRS-200-3.3	3.3V, 0~40A	2.97~3.6V	150mV	83%
LRS-200-4.2	4.2V, 0~40A	3.6~4.4V	150mV	86%
LRS-200-5	5V, 0~40A	4.5~5.5V	150mV	87%

■ LRS-200E Series

Model No.	Output	Vo Adj.	R & N	Effi.
LRS-200E-4.2	4.2V, 0~32A	3.6~4.4V	150mV	80%
LRS-200E-5	5V, 0~32A	4.5~5.5V	150mV	80%

■ LRS-350 Series



Model No.	Output	Vo Adj.	R & N	Effi.
LRS-350-3.3	3.3V, 0~60A	2.97~3.6V	150mV	79.5%
LRS-350-4.2	4.2V, 0~60A	3.6~4.4V	150mV	81.5%
LRS-350-5	5V, 0~60A	4.5~5.5V	150mV	83.5%

■ LRS-300E Series

Model No.	Output	Vo Adj.	R & N	Effi.
LRS-300E-4.2	4.2V, 0~60A	3.6~4.4V	150mV	78%
LRS-300E-5	5V, 0~60A	4.5~5.5V	150mV	80%

LHP Series

200W Single Output

Features

- Universal AC input / Full range : 90~264VAC
- Current Sharing Function
- Built-in parallel "PG" signal
- Low profile (26mm)
- Working temperature
(please refer to derating curve) : -40~+80°C
- Built-in active PFC function, PF≥0.95
- Fanless design, cooling by free air convection
- Low leakage current<1mA
- LED indicator for power on
- High efficiency / Slim design / Low voltage output
- Protections: Short circuit / Overload /
Over voltage / Over temperature
- 3 years warranty



■ LHP-200 Series

Model No.	Output	Vo Adj.	R & N	Effi.
LHP-200-4.2	4.2V, 0~40A	3.8~4.2V	200mV	90%
LHP-200-4.6	4.6V, 0~40A	4.2~4.6V	200mV	91%
LHP-200-5	5V, 0~40A	4.5~5V	200mV	91%

HDP Series

190W/240W Dual Output

Features

- Universal AC input / Full range
- Slim design, low profile
- Built-in active PFC function, PF≥0.94
- Conformal coated
- Protections: Short circuit / Overload /
Over voltage / Over temperature
- Working temperature
(please refer to derating curve) : -30~+70°C
- LED indicator for power on
- High efficiency up to 86%(HDP-190);
up to 84%(HDP-240)
- Fanless design(HDP-190); Built-in DC fan(HDP-240)
- 3 years warranty

■ HDP-190 Series

Model No.	Output	Vo Adj.	R & N	Effi.
HDP-190	3.8V, 0~40A	3.6~4V	100mV	86%
	2.8V, 0~22A	2.5~3V	100mV	



■ HDP-240 Series

Model No.	Output	Vo Adj.	R & N	Effi.
HDP-240	3.8V, 0~50A	3.6~4V	100mV	84%
	2.8V, 0~27.5A	2.5~3V	100mV	

HSN Series

200W/300W Single Output

Features

- Universal AC input / Full range : 90~132VAC or 180~264VAC
- Low profile
- Conformal coated
- Low leakage current : <1mA/240VAC
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Working temperature (please refer to derating curve) :
-25~+70°C(HSN-200), -20~+70°C(HSN-300)
- Fanless design, cooling by free air convection
- LED indicator for power on
- 2 years warranty

■ HSN-200 Series

Model No.	Output	Vo Adj.	R & N	Effi.
HSN-200-4.2 □	4.2V, 0~40A	3.6~4.4V	150mV	86.5%
HSN-200-5 □	5V, 0~40A	4.5~5.5V	150mV	86.5%

□ = A or B-Type; A-Type: 90~132VAC, 30A output; B-Type: 180~264VAC, 40A output



■ HSN-300 Series

Model No.	Output	Vo Adj.	R & N	Effi.
HSN-300-4.2 □	4.2V, 0~60A	3.6~4.4V	150mV	85%
HSN-300-5 □	5V, 0~60A	4.5~5.5V	150mV	86%

□ = A or B-Type; A-Type: 90~132VAC, 50A output; B-Type: 180~264VAC, 60A output

NEL Series

400W Single Output

Features

- AC input range : 180~264VAC
- Withstand 300VAC surge input for 5 seconds
- Low profile/Slim design & Low cost/Conformal coated
- Protections: Short circuit / Overload /
Over voltage/ Over temperature

- Working temperature
(please refer to overload derating curve) : -20~+60°C
- Forced air cooling by built-in DC fan
- LED indicator for power on
- 2 years warranty



■ NEL-400 Series

Model No.	Output	Vo Adj.	R & N	Effi.
NEL-400-2.8	2.8V, 0~80A	2.5~3.0V	150mV	79%
NEL-400-4.2	4.2V, 0~80A	3.6~4.4V	150mV	83%
NEL-400-5	5V, 0~80A	4.5~5.5V	150mV	84%

ERP Series

350W Single Output

Features

- AC input range : 180~264VAC
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload /
Over voltage/ Over temperature
- Cooling by free air convection



- LED indicator for power on
- Low cost, high reliability
- 100% full load burn-in test
- 3 years warranty

■ ERP-300 Series

Model No.	Output	Vo Adj.	R & N	Effi.
ERP-350-12	12V, 0~26.7A	10.8~13.2V	150mV	87%
ERP-350-24	24V, 0~14.6A	21.6~26.4V	150mV	89%
ERP-350-36	36V, 0~9.7A	32.4~39.6V	240mV	90%
ERP-350-48	48V, 0~7.3A	43.2~52.8V	240mV	90%

ERPF Series

400W Single Output

Features

- Universal AC input / Full range
(Withstand 300VAC surge input for 5 seconds)
- Built-in active PFC function, PF \geq 0.95
- High efficiency up to 91%
- Design against rain splash
- Cooling by free air convection



- Protections: Short circuit / Overload /
Over voltage/ Over temperature
- LED indicator for power on
- Low cost, high reliability
- 100% full load burn-in test
- 3 years warranty

■ ERPF-400 Series

Model No.	Output	Vo Adj.	R & N	Effi.
ERPF-400-12	12V, 0~30A	10.8~13.2V	150mV	89%
ERPF-400-24	24V, 0~16.7A	21.6~26.4V	150mV	90%
ERPF-400-48	48V, 0~8.3A	43.2~52.8V	240mV	91%

HBG Series 60~240W Circular shape LED driver for High-Bay Lights

HBG series are high performance and single output LED power supplies specially designed for the high/low bay lighting and spot lighting applications. Featuring with circular shape, these new series are easy to be assembled and perfectly fit in with the mechanical structure of high/low bay lighting fixtures. Fully potted by thermally conductive epoxy resin, HBG series aluminum enclosure can be tightly assembled to the heat sink of lighting fixtures and provide excellent heat dissipation ability (PCB type available for HBG series), which solve the mechanism limits of old style bay lighting systems using slim shape LED power supplies. As long as the temperature on the top of the enclosure can be controlled under 70°C, the power supply service life could be guaranteed up to 50,000 hours. For more details, please visit MEAN WELL' s website: www.meanwell.com

HBG-60 Series



- 90~295VAC input
- PCB type, plastic case
- Constant current mode

HBG-100 Series



- 90~305VAC input
- PCB type, metal case
- Constant current mode

HBG-160 Series



- 90~305VAC input
- PCB type, metal case
- C.C. + C.V. mode

HBG-240 Series



- 90~305VAC input
- PCB type, metal case
- C.C. + C.V. mode

40~600W LED Drivers for Street Lamps

Equipped with high PF value and high IP protection level, MEAN WELL street lamps LED driver provides outstanding surge withstand ability, various dimming options, and 5 to 7 years of warranty. Full range of products comply with international safety regulations, very suitable for indoor/ outdoor harsh environment and LED street lighting applications. In addition to AC/DC power supplies, MEAN WELL also provides constant current DC/DC converters, including step-up, step-down and buck-boost types, which enables the LED fixtures with multiple parallel channels design to have ideally stable constant current state.

AC/DC Switching Power Supply



- Type HL LED Driver for use in Class I, Division 2 hazardous location luminaires
- Multiple models for choice :
Built-in 3 in 1 dimming function (0~10VDC/PWM signal/ or resistance) / Output constant current level can be adjusted / DALI control technology / Smart timer dimming function

DC/DC LED Driver



- Constant current step-up modes (LDH/LDD-H series);
Constant current step-down mode (LDD-L series);
Constant current buck-boost mode (LDB-L series)
- Comply with EN55015 / FCC part 15 without additional input filter and capacitors
- Wide input and output voltage range

LED Power Solution

Standard LED Driver



HLG/HLG-C Series



HVG/HVGC Series



ELG Series



CLG/CEN Series



LPF Series



OWA/NPF/PWM Series



PLN/HLN Series



IDL/ODL Series



PLM Series



LP/AP Series



LCM Series



HBG Series



HLP/PLP/IDP Series



GSC Series



LDD/LDH Series



LED Accessories

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Your Reliable Power Partner



High Performance & Compact Design
Configurable Power Supply

450W~1200W Modular Series



Company Profile

Established in 1982, MEAN WELL is a leading standard switching power supply manufacturers in the world.

MEAN WELL currently operates under five companies in Taiwan, China, USA and Europe and three factories in Taiwan, GuangZhou and SuZhou. The product lines include AC/DC switching power supplies, DC/DC converters, waterproof LED drivers, adaptors, DC/AC inverters and battery chargers. We have over 9,500 standard models widely used in medical, automation, communication, LED lighting, moving sign, and office automation fields.

With more than 30 years of experience in R&D and production of standard power supplies, MEAN WELL has ten product categories covering 9,500 models, to provide "One Stop Shopping" power solutions. Every product in MEAN WELL is the result of rigid procedures governing design, design verification test (DVT), design quality test (DQT), component selection, pilot-run production, and mass production.

With more than 200 distributors globally, the MEAN WELL products are distributed to over 80 countries worldwide. The small size orders can expect delivery within 24 hours without MOQ requirement. If you are looking for switching power supply with high reliability, good quality, reasonable price and full series products, MEAN WELL, a total solution provider which can satisfy your various demands, is definitely your first choice!



MEAN WELL USA



MEAN WELL EUROPE



MEAN WELL TAIWAN

MEAN WELL SUZHOU



MEAN WELL GUANGZHOU
TIANHE R&D CENTER

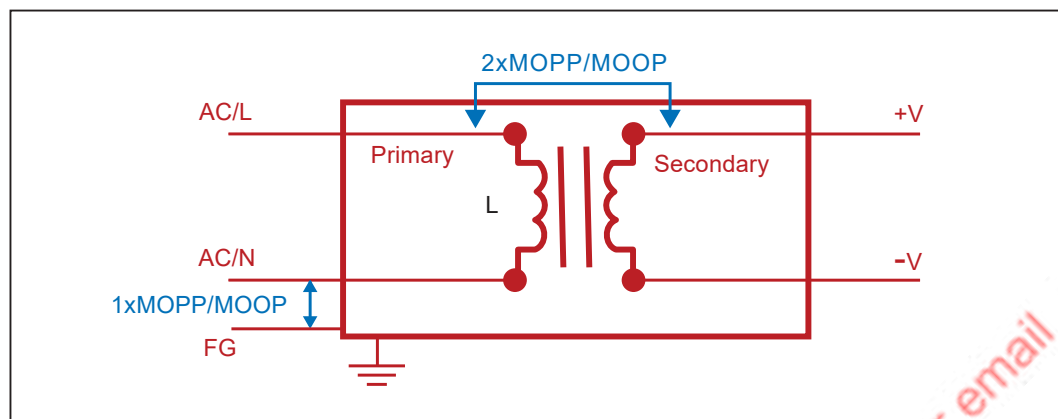


MEAN WELL GUANGZHOU
HUADU FACTORY



2xMOPP Introduction

MOPP stands for Mean of Patient Protection. It is the latest requirement as per 60601-1 3rd edition. 2xMOPP means PSU with double insulation (DI) between Primary and Secondary sides and 1xMOPP between Primary to protective earth (FG) at normal condition. Shown as figure below. PSU with 2xMOPP can be implemented on almost **ALL** medical devices!



BF rated devices

Type BF (body floating) is generally used for applied parts that have conductive contact with the patient, or have medium or long term contact with the patient. Examples of this type of equipment are ultrasound scanner, blood pressure monitors, incubators and etc...



NMP Series

650W/1200W Intelligent Medical Modular Power Supply



Medical



2xMOPP



BF rated



Industrial



Telecom



Configurable

- Cover 3 to 55Vdc output range
- Modules can be in Parallel or Serial connection

Medical Applications

- 60601-1 Ed. 3 certified
- Touch current <100μA/264Vac

Intelligent Control

- Global & Local remote ON/OFF control
- DC OK signal
- T-Alarm (OT Warning signal for OTP)

Output Programmable

- PV range 50-100%
- PC range 40-100%

Series Connection



Parallel Connection



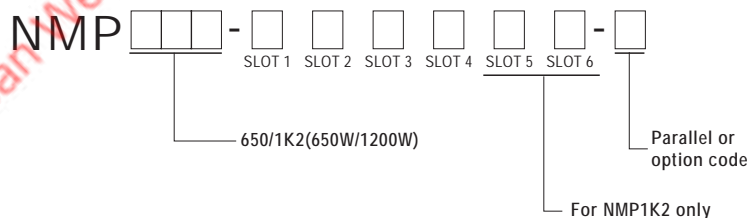
Front View



Others


- 90~264VAC
- Working temp.: -30~70°C
- Built-in DC fan
- 5 years warranty

Output Configuration Guide



NMP Series SPEC

■ MS-240 : 1-SLOT isolated single output (240W max.)

Picture	Item Code	Output	Vdc adj.	Tol.	R&N.	Max.
	C	5V, 0~36A	3~6V	±2%	100mV	180W
	E	12V, 0~20A	6~15V	±1%	150mV	240W
	H	24V, 0~10A	15~30V	±1%	150mV	240W
	K	48V, 0~5A	30~55V	±1%	250mV	240W



X-ray and
Image Diagnostic Machine



Automation Robot Arms

NMP Series Accessory

■ Parallel Connection Accessory

FAP-009 (for NMS-240, 2 units)	FAP-010 (for NMS-240, 3 units)

NMS-240-P2/P3/P4/P5/P6 (to parallel NMS-240 in 2/3/4/5/6 modules)

■ Series Connection Accessory

FAS-005 (for 1-slot modules: NMS-240)

■ Blank Plate Accessory

BLANK-NMS240



Medical Equipment
MRI Scanner



Telecommunication

MP Series

450W/650W/1000W Modular Power



Industrial Applications

IEC/EN/UL 60950 certified

Output Adjustable

PV range $\pm 5\%$

Remote Control

Remote ON/OFF control on single power module

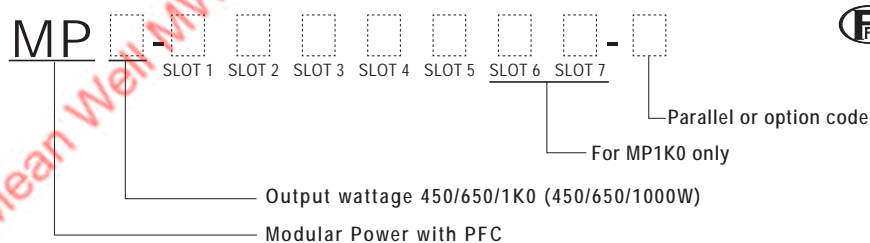
Others

- 85~264VAC
- Protection: SCP, OLP, and fan fail alarm
- Cooling by build-in DC fan
- 3 years warranty

Configurable

- Cover 1.6 to 53Vdc output range with total 57 output modules
- Modules can be in Parallel or Serial connection

Output Configuration Guide



MP Series SPEC

MP Series Accessory

Parallel Connection Accessory

FAP-001	FAP-002	FAP-003	FAP-004
FAP-005	FAP-006	FAP-007	FAP-008

Series Connection Accessory

FAS-001	FAS-002	FAS-003	FAS-004



Color Offset
Printing Machine

Industrial Power Panel

■ MS-75 : 1-SLOT single output (75W max.)



Item Code	L	M	N	O	P	Q
Output	3.3V, 0~15A	5V, 0~15A	12V, 0~6.3A	15V, 0~5.0A	24V, 0~3.2A	48V, 0~1.6A
Vdc adj.	2.6~4.0V	4.0~6.0V	9.0~13.2V	13.2~16.8V	20.0~26.4V	40.0~53.0V

■ MS-150 : 1-SLOT single output (150W max.)



Item Code	A	B	C	D	E	F	G	H	I	J	K
Output	2V, 0~25A	3.3V, 0~25A	5V, 0~25A	7.5V, 0~18A	12V, 0~13A	15V, 0~10A	18V, 0~8.5A	24V, 0~6.5A	27V, 0~5.8A	33V, 0~4.7A	48V, 0~3.2A
Vdc adj.	1.6~2.6V	2.6~4.0V	4.0~6.0V	6.0~9.0V	9.0~13.2V	13.2~16.8V	16.8~20.0V	20.0~26.4V	25.0~31.0V	30.0~40.0V	40.0~53.0V

■ MS-210 : 1-SLOT parallelable single output (210W max.)

※Parallel function up to 5 units



Item Code	1A	1B	1C	1D	1E	1F	1G	1H	1I	1J	1K
Output	2V, 0~35A	3.3V, 0~35A	5V, 0~35A	7.5V, 0~28A	12V, 0~17.5A	15V, 0~14A	18V, 0~11.6A	24V, 0~8.75A	27V, 0~7.8A	33V, 0~6.4A	48V, 0~4.4A
Vdc adj.	1.6~2.6V	2.6~4.0V	4.0~6.0V	6.0~9.0V	9.0~13.2V	13.2~16.8V	16.8~20.0V	20.0~26.4V	25.0~31.0V	30.0~40.0V	40.0~53.0V

■ MS-300 : 2-SLOT parallelable single output (300W max.)

※Parallel function up to 3 units



Item Code	2A	2B	2C	2D	2E	2F	2G	2H	2I	2J	2K
Output	2V, 0~50A	3.3V, 0~50A	5V, 0~50A	7.5V, 0~40A	12V, 0~25A	15V, 0~20A	18V, 0~16.7A	24V, 0~12.5A	27V, 0~11.2A	33V, 0~9.1A	48V, 0~6.3A
Vdc adj.	1.6~2.6V	2.6~4.0V	4.0~6.0V	6.0~9.0V	9.0~13.2V	13.2~16.8V	16.8~20.0V	20.0~26.4V	25.0~31.0V	30.0~40.0V	40.0~53.0V

■ MS-360 : 2-SLOT parallelable single output (360W max.)

※Parallel function up to 3 units



Item Code	3A	3B	3C	3D	3E	3F	3G	3H	3I	3J	3K
Output	2V, 0~60A	3.3V, 0~60A	5V, 0~60A	7.5V, 0~48A	12V, 0~30A	15V, 0~24A	18V, 0~20A	24V, 0~15A	27V, 0~13.4A	33V, 0~11A	48V, 0~7.5A
Vdc adj.	1.6~2.6V	2.6~4.0V	4.0~6.0V	6.0~9.0V	9.0~13.2V	13.2~16.8V	16.8~20.0V	20.0~26.4V	25.0~31.0V	30.0~40.0V	40.0~53.0V

■ MD-100 : 1-SLOT isolated dual output (100W max.)



Item Code	R	S	T	U	V	W	X
Output	5V, 2.0~10A 5V, 0.0~8.0A	5V, 2.0~10A 12V, 0.0~5.8A	5V, 2.0~10A 15V, 0.0~4.7A	24V, 0.5~3.0A 5V, 0.0~10A	24V, 0.6~3.0A 12V, 0.0~4.7A	12V, 1.0~5.0A 12V, 0.0~5.8A	15V, 1.0~4.7A 15V, 0.0~4.7A
Vdc adj.	4.75~5.5V 4.75~5.5V	4.75~5.5V 11.4~13.2V	4.75~5.5V 14.2~16.5V	22.8~26.4V 4.75~5.5V	22.8~26.4V 11.4~13.2V	11.4~13.2V 11.4~13.2V	14.2~16.5V 14.2~16.5V

Common Features for MP&NMP

Modular Power Design

Easy configurable design, offer the most flexible power solutions.



Programmable Output Function

Output voltage is adjustable. By using external DC signal, output voltage can be tuned up or down according to end user's need.

NMP Series



PV range: 50%-100%
PC range: 40%-100%

MP Series



PV range: $\pm 5\%$

Multiple Application

MP and NMP series cover wide output voltage range. MP series covers 1.6~53 Vdc, and NMP series covers 3~55 Vdc. Furthermore, with parallel and series connection function, both series can easily meet various power requirements.



NMP+MP Series



Medical Equipment



Industrial Automation



Tele-communication



Compact Dimension

NMP Series

Dimensions(LxWxH):

- NMP650: 250x 89x 41mm
- NMP1K2: 250x 127x 41mm



MP Series

Dimensions(LxWxH):

- MP450: 254x 127x 63.5mm
- MP650: 278x 127x 63.5mm
- MP1K0: 278x 177.8x 63.5mm



New for NMP Series

Intelligent Control

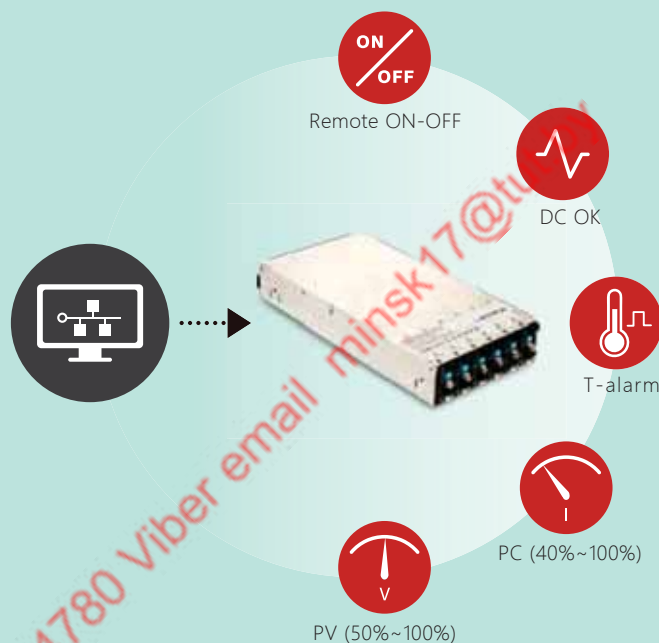
NMP Series features remote ON/OFF, DC OK signal output, T-alarm signal output, and PC & PV output programmable functions to enable system with smart monitoring and handy control over power supply.

Remote ON/OFF

With Global and Local ON/OFF control, it allows user to turn on all modules at once or turn on specific module.

T-alarm

By adopting this new feature, PSU can send out over-temperature alert thru TTL signal to system warning possible over-heating event.



Easy Inventory Management

NMP Series has a lean product line-up with merely 2 front-ends and 4 power modules in total. Inventory management is no longer a difficult job for distributors!

NMS-240



x4

MS-75/150/
210/300/
360



x57

MD-100

1U Low Profile

MEAN WELL design engineers implement the latest technology to make possible NMP Series in a slim size. NMP Series successfully reduces nearly 60% in size compared with its predecessor MP Series. Thanks to its smaller size, NMP Series can be used on applications that space constraint is a critical concern to system design.

60%



Assembly Illustration for NMP Series

Product Description

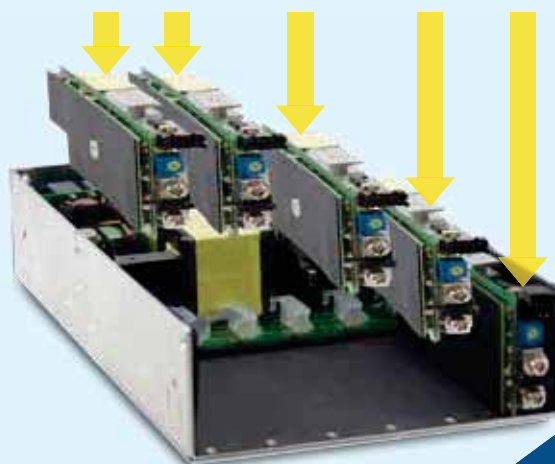
Configurable type power supply, NMP family, is a 1U low profile modular power. This family comprises two models, NMP650 (650W) and NMP1K2 (1200W). To offer wide application aspects, NMP family complies with medical standards safety approval and its design refers to ITE standards. Furthermore, by applying safety approvals on Front-End (NMP650 & NMP1K2) and power modules (NMS-240) respectively, distributors whose technical and service capability being qualified by MEAN WELL might be officially authorized to assemble NMP power systems according to end customers' requirements.

Remove screws from left and right sides of the case. And detach the top cover.



STEP 1

Install modules to NMP1K2/NMP650 Front-End in the order from right to left. 5V / 12V / 24V / 48V modules are available for choice.



STEP 2

Put back the top cover and fasten screws to positions as illustration.



STEP 3

Stick corresponding product model label onto top cover of Front-End.



STEP 4

Apply AC power to NMP1K2 / NMP650 and measure output voltage to ensure each module functions properly. Use two 2-unit parallel cooper plates, FAP-009, to connect +V and -V terminals of slot 1 and slot 2, and use accessory cable to parallel GND pins and signals when modules in parallel.

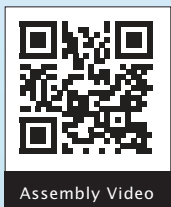


STEP 5

Welcome to scan QR codes
for more product information.



Introduction Video



Assembly Video

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Your Reliable Power Partner



Building Automation Solutions

Product Range Overview



Company Profile

Established in 1982, MEAN WELL is a leading standard switching power supply manufacturers in the world. MEAN WELL currently operates under five companies in Taiwan, China, USA and Europe and three factories in Taiwan, GuangZhou and SuZhou. The product lines include AC/DC switching power supplies, DC/DC converters, waterproof LED drivers, adaptors, DC/AC inverters and battery chargers. We have over 10,000 standard models widely used in medical, automation, communication, LED lighting, moving sign, and office automation applications.

With more than 30 years of experience in R&D and production of standard power supplies, MEAN WELL has ten product categories covering 10,000 models, to provide "One Stop Shopping" power solutions. Every product in MEAN WELL is the result of rigid procedures governing design, design verification test (DVT), design quality test (DQT), component selection, pilot-run production, and mass production.

With more than 200 distributors globally, the MEAN WELL products are distributed to over 80 countries worldwide. The small size orders can expect delivery within 24 hours without MOQ requirement. If you are looking for switching power supply with high reliability, good quality, reasonable price and full series products, MEAN WELL, a total solution provider which can satisfy your various demands, is definitely your first choice!



MEAN WELL USA



MEAN WELL EUROPE



MEAN WELL TAIWAN

MEAN WELL SUZHOU



MEAN WELL GUANGZHOU
TIANHE R&D CENTER



MEAN WELL GUANGZHOU
HUADU FACTORY



KNX Introduction

What is KNX?

KNX is the only home and building control standard running global certification schemes.

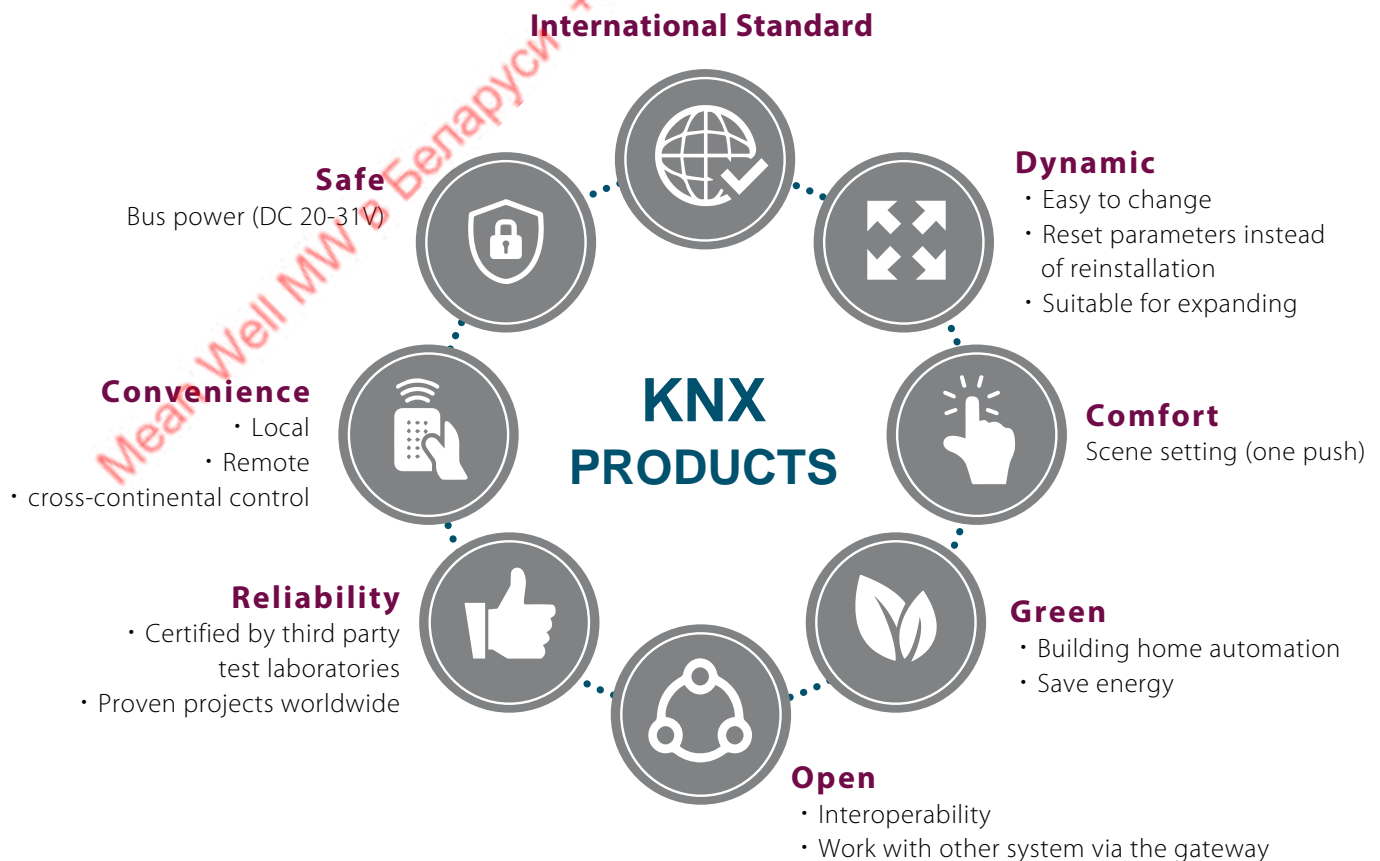


The idea behind KNX is as simple as it is ingenious. KNX combines all main building functions like lighting, shutter control to heating, ventilation, security, energy management and more into one intelligent system. In this system, all devices communicate with one another via a single bus cable which is installed alongside the normal power lines. This means that all electrical functions are connected with one another via the bus system, which helps to lower operational costs resulting in considerable energy savings, to save installation time as well as to increase flexibility and adaptability to future developments.

Source: www.knx.org

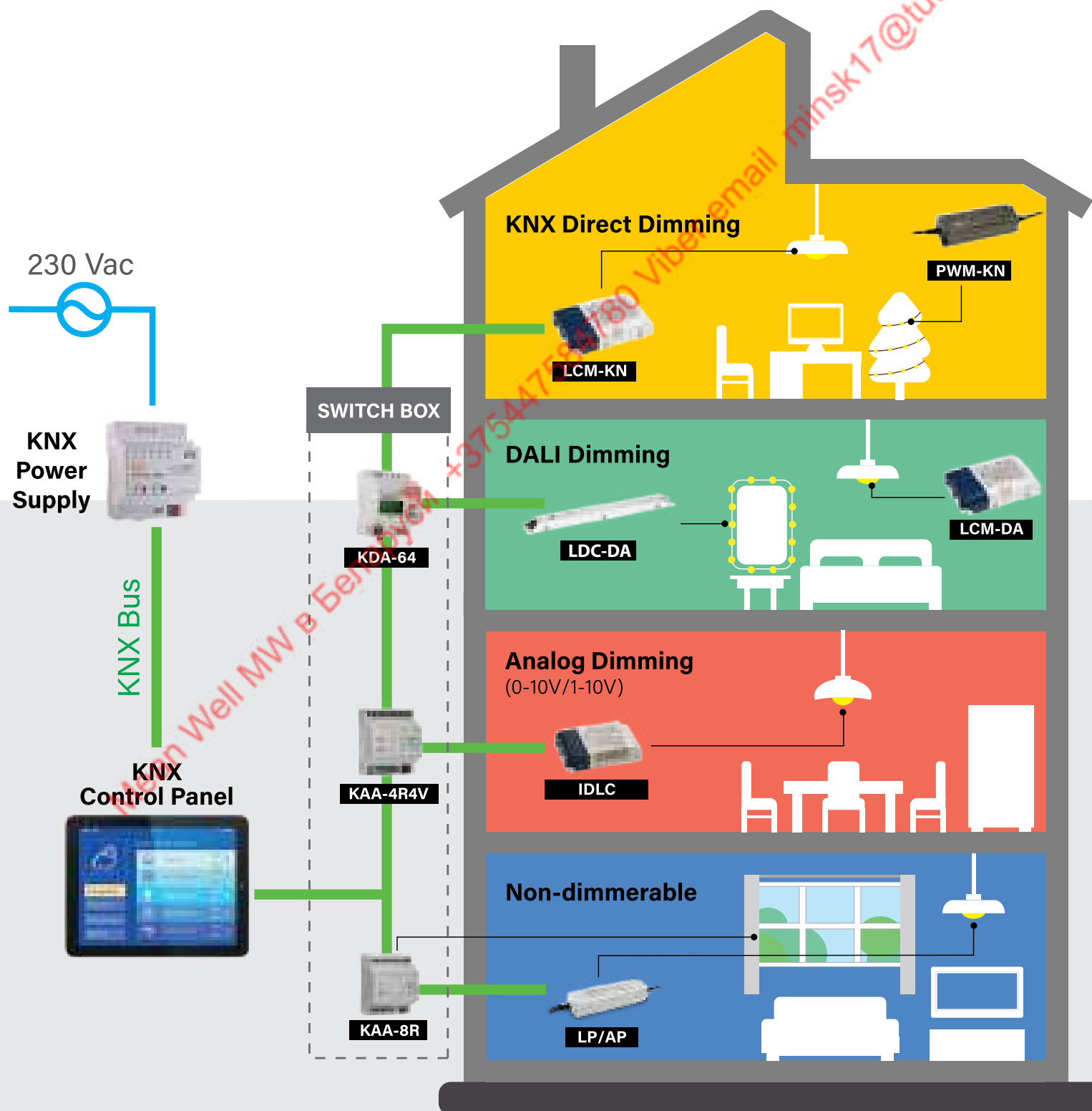
Benefits

The MEAN WELL KNX system product is an intelligent solution for networking and controlling building technology. Since the targeted connections of devices and functions comply with the KNX standard, both living and working are not only become more convenient and secure, but also more energy-efficient and economical.

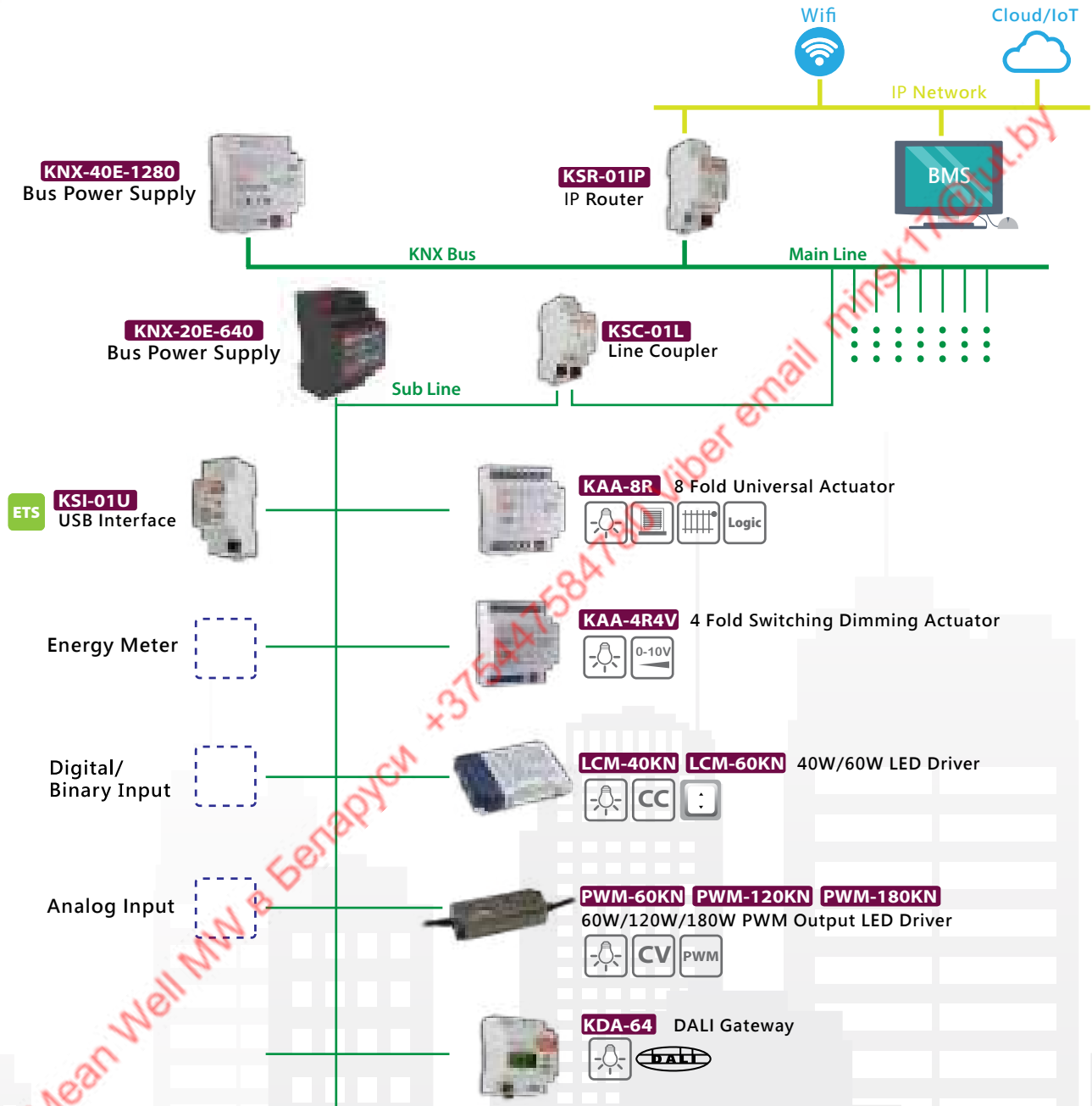


Indoor Lighting Control & Total Power Solution

The MEAN WELL KNX product range includes components covering the complete applications found in modern buildings, ranging from lighting and shutter control to heating, ventilation and many more. Furthermore, with over 35 years experience of the industrial power supply, MEAN WELL provides a variety of standard power supplies for all kinds of applications such as safety, surveillance, video, audio... etc.



Product Tree



	Under Planning		Blind/Shutter Control		Logic Function		Constant Current Driving Mode		DC 0-10V Dimming Control
	Lighting Control		Heating Control		Push Button Interface		Constant Voltage Driving Mode		PWM Style Output Mode

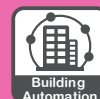


Fast and Multi Language Support for any question of KNX product within 24 hr.
For the details please check the last page.



LCM Series

25~60W KNX Constant Current LED Driver



LCM-KN series is a AC/DC constant current mode output LED driver series featuring the multiple levels selectable by dip switch and the KNX interface to avoid using the complicated KNX-DALI gateway. LCM-KN operates from 180~295VAC and offers different current levels ranging between 350mA and 1400mA.

Thanks to the high efficiency up to 90%, with the fanless design, the entire series is able to operate for -30°C~+90°C case temperature under free air convection. In addition, LCM-KN series is equipped with push dimming and synchronization so as to provide the optimal design flexibility for LED lighting system.



▲ **LCM-25KN**
L105x W68x H23mm



▲ **LCM-40/60KN**
L123.5x W81.5x H23mm

Features

- KNX protocol
- Constant current mode output with multiple levels selectable by dip switch
- Support emergency lighting(EL)
- Constant lumen output
- Integrated KNX push button interface
- Synchronization up to 10 units
- Functions: manual dim, operation hours, log/linear curve selection
- 3 years warranty



■ LCM-25/40/60KN

Model No.	Output	Io Tol.	Io Ripple	Effi.
LCM-25KN	350mA~1050mA, 6~54V	±5%	5%(max)	86%
LCM-40KN	350mA~1050mA, 2~100V	±5%	5%(max)	90%
LCM-60KN	500mA~1400mA, 2~90V	±5%	5%(max)	91%

PWM Series

60~180W KNX Constant Voltage LED Driver



PWM-KN series is an AC/DC LED driver featuring the constant voltage mode with PWM style 12V & 24V output controlled directly via KNX. The entire series is able to operate for -40°C~90 °C case temperature with its minimal dimming level low to 0.5% and user changeable output frequency up to 4KHz to complaint IEEE 1789-2015 flickering requirement.



▲ **PWM-60KN**
L150x W53x H35mm



▲ **PWM-120KN**
L191x W63x H37.5mm

Features

- KNX protocol
- Constant Voltage PWM style output with user changeable frequency up to 4KHz
- Plastic housing with class II design
- Built-in active PFC function
- Standby power consumption <0.5W
- Typical lifetime >50000hours
- 5 years warranty



■ PWM-60/120KN

Model No.	Output	Tol.	Effi.
PWM-60-12□	12V, 0~5A	±4%	86%
PWM-60-24□	24V, 0~2.5A	±3%	89%
PWM-120-12□	12V, 0~10A	±4%	88%
PWM-120-24□	24V, 0~5A	±4%	90%

□=KNX/KNBST KN: KNX control technology ; KNBST: KNX control technology with BST14 connector

PWM-180KN Series 180W PWM Output KNX LED Driver

Under Development

- Constant voltage PWM style output with user changeable frequency
- Plastic housing with class II design
- Built-in active PFC function
- No load power consumption <0.5W / standby power consumption <0.5W
- KNX data secure version
- Typical lifetime >50000 hours
- 5 years warranty

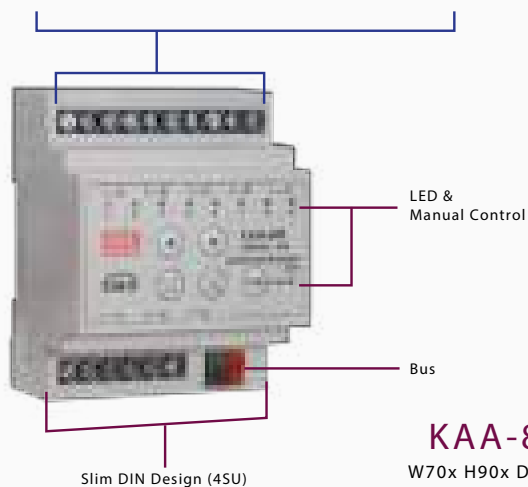


KAA Series

KNX Actuator



KNX Universal Actuator



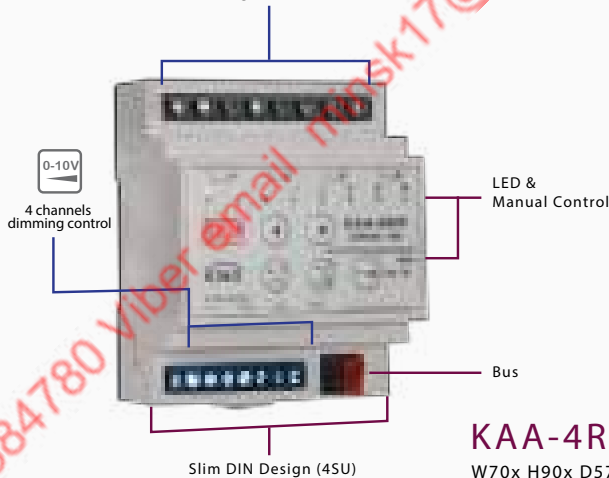
KAA-8R

W70x H90x D57mm

Features

- 8 channel actuator in a compact size
- Suitable for various and mixed applications
- For AX, C-load, capacitive & inductive of loads
- Capacitive load 220 μ F
- Manual control via panel Push button
- 3 years warranty

KNX Dimming Actuator



KAA-4R4V

W70x H90x D57mm

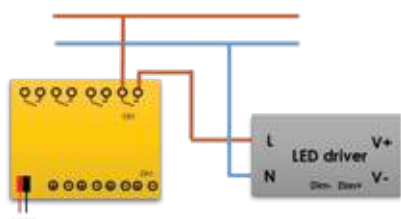
Features

- Dimming and switching LED driver and conventional electronic ballast
- Capacitive load 220 μ F
- Linear or logarithmic dimming curve programmable via ETS software
- Programmable various time and scene function
- 3 years warranty

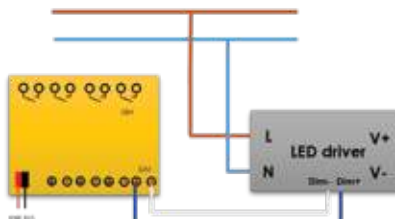
Model No.	Channel	Rating current/channel
KAA-8R	8-Fold	16A
KAA-8R-10	8-Fold	10A

Model No.	Channel	Rating current/channel
KAA-4R4V	4-Fold	16A
KAA-4R4V-10	4-Fold	10A

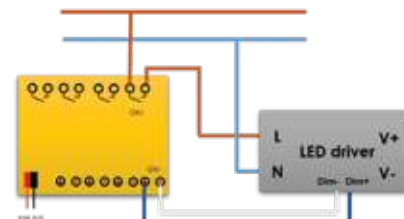
KAA-4R4V Wiring Examples



1. Non-dimmable Driver



2. DC 0-10V Driver



3. DC 1-10V Driver

KNX Series

640mA & 1280mA Bus Power Supply



640mA Bus Power Supply

KNX-20E-640 is a 640mA power supply with high efficiency and a small footprint of only 3SU (52.5 mm). The device has a KNX bus choke output and an additional output for ancillary power. LED indicators are used in normal operation, overload conditions and RESET operation. It is perfectly suitable to power up any products labeled with the KNX trademark. KNX-20E-640 is engineered to be a reliable and safe solution for KNX bus environment.



1280mA Bus Power Supply

KNX-40E-1280 is a 1280mA power supply with high efficiency and a small footprint of only 4SU (72mm). The device has a KNX bus choke output and an additional output for ancillary power. LED indicators are used in normal operation, overload conditions and RESET operation. It is perfectly suitable to power up any products labeled with the KNX trademark. KNX-40E-1280 is engineered to be a reliable and safe solution for KNX bus environment.



Features

- EIB / KNX power supply with Integrated choke
- Compact size with 3SU/4SU width
- Safety extra low voltage (SELV)
- 180~264VAC input
- No load power consumption <0.5W
- Protections:
Short circuit / Overload (short-circuit-proof) /
Over voltage

- Cooling by free air convection
- Isolation class I
- LED indicator for normal operation, bus reset and bus overload
- Installed on DIN rail TS-35/7.5 or 15
- Over voltage category III
- Wide operating temperature: -30~+70°C
- 3 years warranty

Model No.	V _{out1} (with choke)	V _{out2} (without choke)	I _{out} (I ₁ +I ₂)
KNX-20E-640	Bus, 30VDC	30VDC	640mA

Model No.	V _{out1} (with choke)	V _{out2} (without choke)	I _{out} (I ₁ +I ₂)
KNX-40E-1280 <input type="checkbox"/>	Bus, 30VDC	30VDC	1280mA

☐ : Blank, D ; Blank= Basic function, D=Diagnostic function

System Component / Inrush Current Limiter



DALI Gateway



KDA-64

W86x H72x D55mm



Features

- Connect up to 64 DALI ECGs/Drivers
- Built-in DALI power supply
- Lighting control via the integrated web server
- 3 years warranty

USB Interface



KSI-01U

W36x H90x D71mm



Features

- No additional power supply required
- KNX commissioning addressing and parameters settings
- Long messages support up to 220 byte APDU
- 3 years warranty

IP Router



KSR-01IP

W36x H90x D71mm



Features

- KNX IP/TP routing
- Built-in web server
- KNX IP secure (optional)
- 3 years warranty

Line Coupler



KSC-01L

W36x H90x D71mm



Features

- KNX TP Line coupler/Repeater
- Telegram filtering function
- Long messages support up to 240 byte APDU
- 3 years warranty

Inrush Current Limiter



ICL-16R

W35x H94x D54.5mm

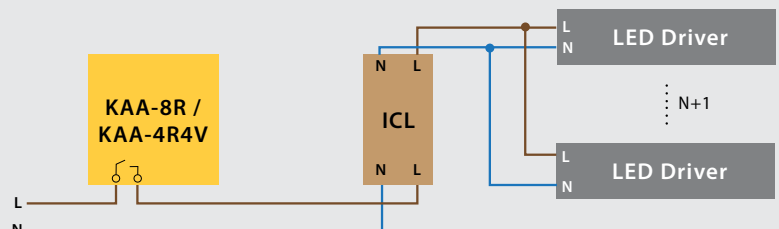


ICL-16L

W175x H42x D24mm

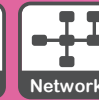
Features

- Increase the capacitive load to 2500 μ F max.
- 23A inrush current limiting, 16A continuous
- Integrated by pass relay, no simple NTC
- R:DIN Rail type ; L: Terminal block type



HDR Series

15~150W Ultra Slim Step Shape Power Supply



Features

- Ultra slim design with 15U~6SU width
- Universal input 85~264VAC(277VAC operational)
- No load power consumption<0.3W
- Isolation class **II**
- Pass LPS (Limited power source)
- DC output voltage adjustable
- Protections : Short circuit / Overload / Over voltage
- Cooling by free air convection (working temperature:-30~+70°C)
- DIN rail TS-35/7.5 or 15 mountable
- Over voltage category **III**
- LED indicator for power on
- 3 years warranty



▲HDR-15
L17.5x W90x D54.5mm



▲HDR-30
L35x W90x D54.5mm



▲HDR-60
L52.5x W90x D54.5mm



▲HDR-100
L70x W90x D54.5mm



▲HDR-150
L105x W90x D54.5mm

■ HDR-15

Model No.	Output	Tol.	R&N	Effi.
HDR-15-5	5V, 0~2.40A	±2%	80mV	80%
HDR-15-12	12V, 0~1.25A	±1%	120mV	85%
HDR-15-15	15V, 0~1.00A	±1%	120mV	85.5%
HDR-15-24	24V, 0~0.63A	±1%	150mV	86%
HDR-15-48	48V, 0~0.32A	±1%	240mV	87%

■ HDR-30

Model No.	Output	Tol.	R&N	Effi.
HDR-30-5	5V, 0~3.0A	±2%	80mV	82%
HDR-30-12	12V, 0~2.0A	±1%	120mV	88%
HDR-30-15	15V, 0~2.0A	±1%	120mV	89%
HDR-30-24	24V, 0~1.5A	±1%	150mV	89%
HDR-30-48	48V, 0~0.75A	±1%	240mV	90%

■ HDR-60

Model No.	Output	Tol.	R&N	Effi.
HDR-60-5	5V, 0~6.5A	±2%	80mV	85%
HDR-60-12	12V, 0~4.5A	±1%	120mV	88%
HDR-60-15	15V, 0~2.0A	±1%	120mV	89%
HDR-60-24	24V, 0~1.5A	±1%	150mV	90%
HDR-60-48	48V, 0~0.75A	±1%	240mV	91%

■ HDR-100

Model No.	Output	Tol.	R&N	Effi.
HDR-100-12	12V, 0~7.1A	±2%	120mV	88%
HDR-100-12N	12V, 0~7.5A	±2%	120mV	88%
HDR-100-15	15V, 0~6.13A	±1%	120mV	89%
HDR-100-15N	15V, 0~6.5A	±1%	120mV	89%
HDR-100-24	24V, 0~3.83A	±1%	150mV	90%
HDR-100-24N	24V, 0~4.2A	±1%	150mV	90%
HDR-100-48	48V, 0~1.92A	±1%	240mV	90%
HDR-100-48N	48V, 0~2.1A	±1%	240mV	90%

HDR-100: 92W max., pass LPS

HDR-100-xxN: 100W max., non-LPS with a wide output adjustable range

■ HDR-150

Model No.	Output	Tol.	R&N	Effi.
HDR-150-12	12V, 0~11.3A	±2%	100mV	89%
HDR-150-15	15V, 0~9.5A	±1%	120mV	89.5%
HDR-150-24	24V, 0~6.25A	±1%	150mV	90.5%
HDR-150-48	48V, 0~3.2A	±1%	200mV	90.5%

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For service, repairs and telephone support, you can talk to one of our in-house employees. This ensures that you receive specialist advice. You won't simply end up in a call center!

中文 任何KNX 產品疑問24小時內快速回覆

簡體中文 任何KNX 产品疑问24小时内快速回覆

GERMAN Schneller Support für jegliche KNX-Produkt Fragen innerhalb von 24 Stunden.

ENGLISH Fast support for any question of KNX Product within 24h.

FRENCH Assistance rapide pour toute question relative aux produits KNX en 24 heures maximum.

SPANISH Soporte rápido para cualquier pregunta de los productos KNX en 24 horas.

DUTCH Wij bieden snelle ondersteuning voor al uw KNX-productvragen binnen 24 uur.

ITALIAN Supporto rapido per qualsiasi richiesta sui nostri prodotti KNX entro 24 ore.

POLISH Szybkie wsparcie dla dowolnego pytania dotyczącego produktu KNX w ciągu 24 godzin.





Your Reliable Power Partner



Green Adaptor

5W~280W AC/DC External Power Supplies



Company Profile

Established in 1982, MEAN WELL is a leading standard switching power supply manufacturers in the world. MEAN WELL currently operates under five companies in Taiwan, China, USA and Europe and three factories in Taiwan, GuangZhou and SuZhou. The product lines include AC/DC switching power supplies, DC/DC converters, waterproof LED drivers, adaptors, DC/AC inverters and battery chargers. We have over 10,000 standard models widely used in medical, automation, communication, LED lighting, display, and office automation fields.

MEAN WELL has invested in the developments of AC/DC external adaptor product lines since 2008, striving for the upgrade of product technology, and the introduction of new regulations. MEAN WELL has already taken the lead in unveiling the green adaptors which comply with the up-to-date energy efficiency regulations (DoE Level VI and CoC version 5) with the ultra low no load power consumption (less than 0.075W to 0.5W) and the highest working efficiency up to 94.5%.

MEAN WELL USA



MEAN WELL EUROPE



MEAN WELL has already constructed the complete product line from 5W to 280W which includes desktop type, wall-mounted type, Class I and Class II type. The whole product line has over 40 series, more than 600 models in total with the output voltages from 5V~48VDC for every kind of the electronic devices. The adaptors of MEAN WELL are highly reliable, they can be operated under -40~+70°C for continuous 24 hours, with 2 to 5 years warranty and comply with the complete international safeties. They can cover the industrial, medical, LED lighting and harsh environment applications and the holistic green adaptor solutions can offer the one stop shopping requirements of customers that MEAN WELL is your best power partner.

With more than 30 years of experience in R&D and production of standard power supplies, MEAN WELL has ten product category covering 10,000 models, to provide "One Stop Shopping" power solutions. Every product in the MEAN WELL range is the result of rigid procedures governing design, design verification test (DVT), design quality test (DQT), component selection, pilot-run production, and mass production.

With more than 200 distributors globally, the MEAN WELL products are distributed to over 80 countries worldwide. The small size orders can expect delivery within 24 hours without MOQ requirement. If you are looking for switching power supply with high reliability, good quality, reasonable price and full series products which can satisfy your various demands, MEAN WELL, a total solution provider, is definitely your first choice!

MEAN WELL SUZHOU



MEAN WELL TAIWAN



MEAN WELL GUANGZHOU



MEAN WELL GUANGZHOU INDUSTRIAL PARK



Reliable Quality

The brand name "MEAN WELL" is defined as "have good intentions". We strongly believe that the product quality is the life of power supply manufacturer. "To become the reliable power partner" has been the motivation for MEAN WELL to grow continuously.

In 1994, MEAN WELL acquired the ISO9001 certification and began to implement the total quality management (TQM) system, which are audited by TUV annually to continuous review and improvement. In April 2013, MEAN WELL acquired the ISO14000 certification and obtained the OHSAS18001 system (ESH, environmental safety and health) in 2015, to take the concept of environmental protection into action, and expect to create a safe and healthy life.



OHSAS18001



ISO9001



ISO14000

MEAN WELL has a complete quality management system. To ensure product quality, 100% burn-in test, function test and pressure test have been applied in manufacturing process, while the MIL-105E sampling method used in IQC, PCBQC (semi-finished products testing) and FQC phases. In the R&D stage, MEAN WELL quality engineers customize the "Test Plan" for each product, to complete the verifications of DFMEA, DVT/DQT, ORT, EMC, drop test, vibration test, thermal shock test, and reliability test.

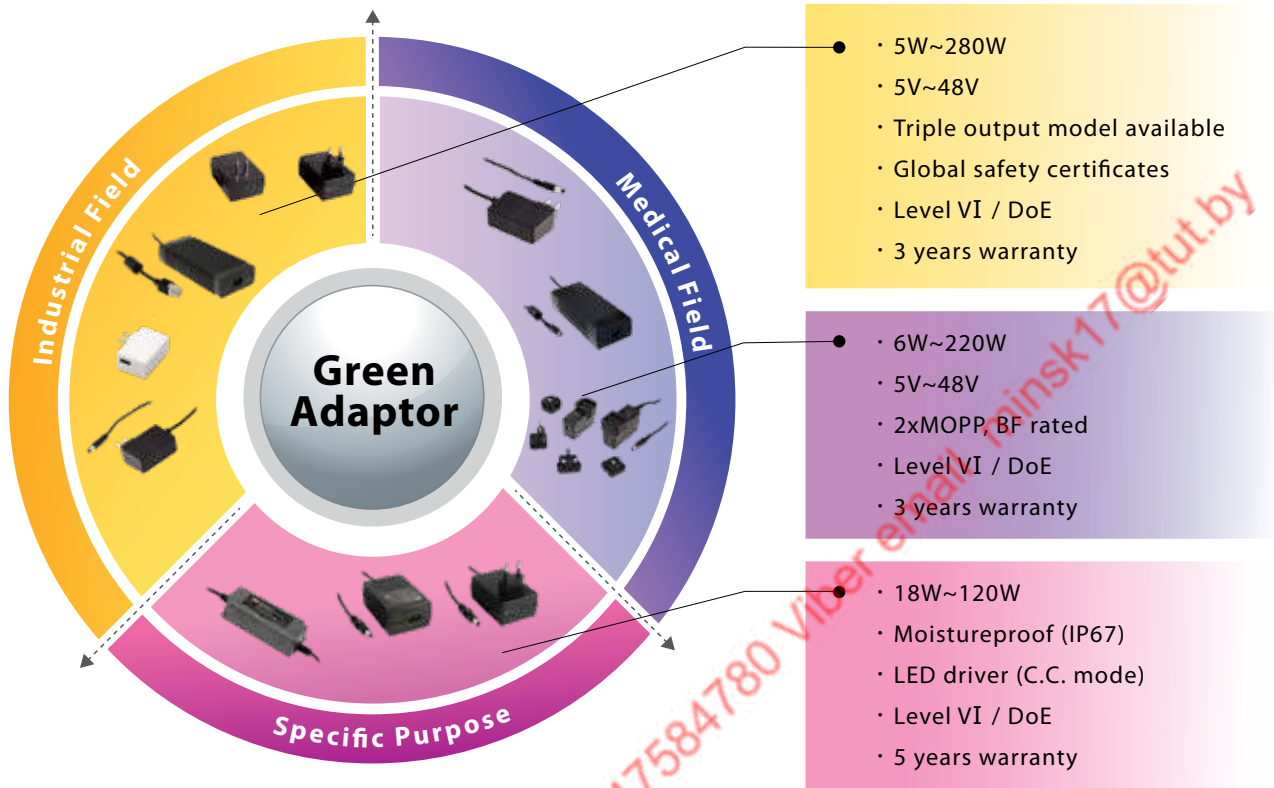




In production stage, the product engineers co-work with process engineers to review the pilot run, semi-finished products quality control, process checking, finished product quality control, and the feedback analysis as well as the production problems occurred.



Product Range



AC Inlet List

Type	A IEC320-C14 (Class I)	B IEC320-C8 (Class II)	U 2 Pole USA plug (Class II)	E 2 Pole EURO Plug (Class II)	I Interchangeable (Class II)
IT	GST, GS, GP series	GST, GS, GP series	GST, GS, SGA series	GST, GS, SGA series	GE series
Medical	GSM series	GSM series	GSM series	GSM series	GEM series
Specific	NA	GSC series	OWA series	OWA, GSC series	NA

Optional DC Plug List

Tuning Fork Style				Barrel Style				Lock Style				DIN 5 Pin				DIN 4 Pin with lock			
Type	A	B	C	Type	A	B	C	Type	A	B	C	Type	Pin Assignment			Type	Pin Assignment		
	OD	ID	L		OD	ID	L						Single	Triple			PIN No.	Output	
P1I	5.5	2.1	9.5	P2I	5.5	2.1	9.5	P2S (S761K)	5.53	2.03	12.06	R1B	1	COM	COM	R7B	1	+Vout	
P1J	5.5	2.1	11.0	P2J	5.5	2.1	11.0						2	COM	COM		2	GND	
P1L	5.5	2.5	9.5	P2L	5.5	2.5	9.5						3	Vout	+5V		3	GND	
P1M	5.5	2.5	11.0	P2M	5.5	2.5	11.0						4	COM	-Vout		4	+Vout	
													5	Vout	+Vout				

► Minimum order quantity is varied for different models.

Industrial Field

GST Series (18~280W)

GS Series (5~15W)

SGA Series (12~60W)

GE Series (12~30W)

GP Series (25~50W)

GST Series



Features

- Global certificates
- Universal input 90~264VAC
- Built-in active PFC function (90~280W)
- No load power consumption <0.075W~0.5W
- Energy efficiency Level VI
- Comply with EISA 2007 / DoE, NRCAN, AU/NZ MEPS, Korea K-MEPS, EU ErP and CoC Version 5
- Class II power (without earth pin) for B/U/E-Type
Class I power (with earth pin) for A-Type
- Protections:
Short circuit / Overload / Over voltage /
Over temperature (60~280W)
- Fanless design, wide working temperature: -30~+70°C

- Fully enclosed plastic case
- LED indicator for power on
- Pass LPS
- 3 years warranty



▲ GST18/25/36U
79x 54x 33mm



▲ GST18/25/36E
79x 54x 33mm

18~36W Wall-mounted Type

U/E Type



Order No.	W	□ =	5V	7.5V	9V	12V	15V	18V	24V	28V	48V
GST18U□-P1J	18	Io(A)	3	2	2	1.5	1.2	1	0.75	0.64	0.375
GST18E□-P1J		Eff.(%)	81	85	85	86	87	88	88	88.5	89
GST25U□-P1J	25	Io(A)	4	2.93	2.55	2.08	1.66	1.38	1.04	0.89	0.52
GST25E□-P1J		Eff.(%)	81.5	84.5	85	86.5	87	87	88	88	89
GST36U□-P1J	36	Io(A)	4.3	---	3.11	3	---	---	1.5	---	0.75
GST36E□-P1J		Eff.(%)	82	---	86	87.5	---	---	88.5	---	90

► For more details about global certifications please refer to page 24.



▲ GST18/25/36B
79x 54x 33mm



▲ GST18/25A
93x 54x 36mm



▲ GST40/60A
125x 50x 31.5mm



▲ GST90A
145x 60x 32mm



▲ GST120A
167x 67x 35mm



▲ GST160A
175x 72x 35mm



▲ GST220A
210x 85x 46mm



▲ GST280A
220x 95x 46mm

18~280W Desktop Type

A/B Type



Order No.	W	□ =	5V	7.5V	9V	12V	15V	18V	19V	20V	24V	28V	36V	48V
GST18A□-P1J	18	Io(A)	3	2	2	1.5	1.2	1	---	---	0.75	0.64	---	0.375
GST18B□-P1J		Eff.(%)	81	85	85	86	87	88	---	---	88	88.5	---	89
GST25A□-P1J	25	Io(A)	4	2.93	2.55	2.08	1.66	1.38	---	---	1.04	0.89	---	0.52
GST25B□-P1J		Eff.(%)	81.5	84.5	85	86.5	87	87	---	---	88	88	---	89
GST36B□-P1J	36	Io(A)	4.3	---	3.11	3	---	---	---	---	1.5	---	---	0.75
		Eff.(%)	82	---	86	87.5	---	---	---	---	88.5	---	---	90
GST40A□-P1J	40	Io(A)	5	5.34	4.45	3.34	2.67	2.22	---	---	1.67	---	---	0.84
		Eff.(%)	84.5	87.5	88.5	89.5	90	90	---	---	91	---	---	92
GST60A□-P1J	60	Io(A)	6	6	6	5	4	3.33	---	---	2.5	---	---	1.25
		Eff.(%)	85.5	88.5	89	89.5	89.5	89.5	---	---	90.5	---	---	92
GST90A□-P1M	90	Io(A)	---	---	---	6.67	6	---	4.74	---	3.75	---	---	1.87
		Eff.(%)	---	---	---	89	89.5	---	90	---	90	---	---	91
GST120A□-○	120	Io(A)	---	---	---	8.5	7	---	---	6	5	---	---	2.5
		Eff.(%)	---	---	---	88.5	89	---	---	90	90.5	---	---	91
GST160A□-R7B	160	Io(A)	---	---	---	11.5	9.6	---	---	8	6.67	---	4.44	3.34
		Eff.(%)	---	---	---	90	91	---	---	93	93	---	92	94
GST220A□-R7B	220	Io(A)	---	---	---	15	13.4	---	---	11	9.2	---	6.1	4.6
		Eff.(%)	---	---	---	90	90	---	---	92	93.5	---	93	94.5
GST280A□-C6P	280	Io(A)	---	---	---	21	17	---	---	13	11.67	---	---	5.84
		Eff.(%)	---	---	---	90	90	---	---	92	93	---	---	94

▶ ○ = R7B for 12V, 15V models; =P1M or R7B for 20V, 24V, 48V models

▶ For more details about global certifications please refer to page 24.

GS Series



Features

- Universal input 90~264VAC
- No load power consumption <0.075W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE and EU ErP
- Class II power (without earth pin) for B/U/E-Type
Class I power (with earth pin) for A-Type
- Protections: Short circuit / Over voltage / Overload
- Highest operating temperature up to **+70°C**
- Fully enclosed plastic case

- Pass LPS
- Certificates:
A-Type: UL / CUL / TUV / EAC / FCC / CE
B-Type: UL / CUL / TUV / EAC / FCC / CE
U-Type: UL / CUL / EAC / FCC
E-Type: TUV / EAC / CE
- 2 years warranty



5~15W Wall-mounted and DesktopType



Order No.	W	□ =	5V	7.5V	9V	12V	15V	18V	24V	48V
GS05U-USB	5	Io(A)	1	---	---	---	---	---	---	---
GS05E-USB		Eff.(%)	74.5	---	---	---	---	---	---	---
GS06U-□P1J	6	Io(A)	1	0.8	0.66	0.5	0.4	0.33	0.25	0.125
GS06E-□P1J		Eff.(%)	75	80.5	79.5	79.5	80.5	81.5	82	85
GS15U-□P1J	15	Io(A)	2.4	1.6	1.66	1.25	1	0.83	0.625	0.31
GS15E-□P1J		Eff.(%)	80	82.5	85	85	85	85	85.5	87
GS15A□-P1J	15	Io(A)	2.4	1.6	1.66	1.25	1	0.83	0.625	0.31
GS15B□-P1J		Eff.(%)	80	82.5	85	85	85	85	85.5	87

SGA Series



Features

- Slim size
- Universal input 90~264VAC
- No load power consumption <0.075W (<0.15W for SGA60 9~48V)
- Energy efficiency Level VI
- Comply with EISA 2007/DoE, EU ErP
- Class II power (without earth pin)
- Protections: Short circuit / Overload / Over voltage
- Working temperature: -20~+60°C by models
- Pass LPS
- Fully enclosed plastic case
- LED indicator for power on (SGA60 only)
- Certificates:
U-Type: UL / CUL / EAC / CB / FCC
E-Type: TUV / EAC / CB / CE
CH-Type: CCC
- 3 year warranty



12~60W Slim Wall-mounted Type

U/E Type



Order No.	W	□ =	5V	7.5V	9V	12V	15V	18V	24V	48V
SGA12U□-P1J*	12	Io (A)	2.4	1.6	1.33	1	0.8	0.666	0.5	0.25
SGA12E□-P1J*		Eff. (%)	80	83	83	83	84.5	85	86	88
SGA18U□-P1J	18	Io (A)	3	---	2	1.5	1.2	1	0.75	0.375
SGA18E□-P1J		Eff. (%)	80.5	---	84.5	84	84	84.5	85	86
SGA25U□-P1J	25	Io (A)	4	2.93	2.77	2.08	1.66	1.38	1.04	0.52
SGA25E□-P1J		Eff. (%)	82	85.5	86	86	86.5	86.5	87	88.5
SGA40U□-P1J	40	Io (A)	5	---	4.44	3.33	2.66	2.22	1.67	0.84
SGA40E□-P1J		Eff. (%)	84	---	87	86.5	86.5	87	88	89
SGA40CH□-P1J										
SGA60U□-P1J	60	Io (A)	6	6	5.5	5	4	3.33	2.5	1.25
SGA60E□-P1J		Eff. (%)	84	86	87	88	87	88	88	91

► USB type output for 12W 5V model only.

Features

- Interchangeable AC plugs (plug kit sold separately)
- Universal input 90~264VAC
- No load power consumption <0.075W
- Energy efficiency Level VI
- Comply with EISA 2007 and EU ErP
- Class II power (without earth pin)
- Protections: Short circuit / Over voltage / Overload
- Working temperature: -10~+50°C
- Fully enclosed plastic case
- LED indicator for power on
- Pass LPS
- Certificates: UL / CUL / TUV / CCC / RCM / FCC / CE / EAC
- 2 years warranty



▲ GE12
70.7x 40x 38.8mm

▲ GE18/24/30
81x 43x 40.5mm

12~40W Interchangeable Wall-mounted Type

I Type



Order No.	W	□ =	5V	7.5V	9V	12V	15V	18V	24V	48V
GE12I□-P1J	12	Io (A)	2	1.33	1.33	1	0.8	0.83	0.625	---
		Eff. (%)	80	82	84	84	85	85	85.5	---
GE18I□-P1J	18	Io (A)	2.4	1.73	2	1.5	1.2	1	0.75	0.375
		Eff. (%)	80.5	82.5	85	86	86.5	87	87	87
GE24I□-P1J	24	Io (A)	3	2	2.22	2	1.6	1.33	1	0.5
		Eff. (%)	81	83	85.5	86	86	87	87.5	89
GE30I□-P1J	30	Io (A)	---	---	---	2.5	2	1.66	1.25	---
		Eff. (%)	---	---	---	84	86	87	87	---

Interchangeable AC Plug Specifically for GE12/18/24/30

AC Plug Type and Order No.				
AC Plug-AU	AC Plug-UK	AC Plug-EU	AC Plug-US	AC Plug-MIX
Australian Type	U.K. Type	European Type	U.S. Type	Mixed Four Type

► The main body unit and AC plug should be ordered separately. The main body needs to be used along with anyone of the AC plug.

GP Series



Features

- Universal input 90~264VAC
- No load power consumption <0.3W
- Energy efficiency Level VI
- Comply with EISA 2007/DoE, EU ErP
- Class I power unit (with earth pin) for A type;
Class II power unit (without earth pin) for B type
- Protections:
Short circuit / Overload / Over voltage /
Over temperature (25W only)
- Working temperature: -20~+70°C
- LED indicator for power on
- Dual output available (optional)
- Certificates: UL / CUL / TUV / CB / FCC / CE / EAC
- 3 years warranty



▲ GP25A
107.5x 67x 36mm



▲ GP25B



▲ GP50A
146x 75.5x 43mm

25~50W Triple Output Desktop Type

A/B Type



Order No.	W	□ =	13A			13D			14E			58F(optional)		
		Vo (V)	5	12	-5	5	12	-12	5	15	-15	16	48	-16
GP25A□-R1B	25	Io (A)	2.5	1.2	0.3	2.5	1	0.3	2.5	0.8	0.3	1.05	0.087	1.05
GP25B□-R1B		Eff. (%)	80			80			80.5			85		
GP50A□-R1B	50	Io (A)	4	2	0.5	4	2	0.5	4	1.5	0.5	2	0.15	2
		Eff. (%)	84			84			84.5			86		



Medical Field

GSM Series (6~220W)

GEM Series (12~60W)

GSM Series



Features

- Universal input 80~264VAC
- Built-in active PFC function (90~220W)
- Medical safety approved (2xMOPP) according to AAMI/ANSI ES60601-1 and IEC/EN60601-1 3rd edition
- ANSI/AAMI EN60601-1-11, EN60601-1-11 household medical regulations for Class II unit
- Suitable for BF application with appropriate system consideration (except for 40~220W A-Type)
- Low leakage current <50μA~100μA
- No load power consumption <0.1W~0.3W
- Energy efficiency Level VI (6W and 18~60W 5~9V for Level V)
- Comply with EISA 2007/DoE, NRCan, AU/NZ MEPS, EU ErP and meet CoC Version 5
- Class II power(without earth pin) for B/U/E-Type
Class I power(with earth pin) for A-Type
- Protections: Short circuit / Overload / Over voltage
- Wide working temperature: -30~+70°C by models
- Fully enclosed plastic case
- LED indicator for power on(except for GSM06/12/60U,E)
- Optional lock type DC plug
- Certificates: A-Type: UL / CUL / TUV / CB / EAC / FCC / CE
B-Type: UL / CUL / TUV / CB /EAC / FCC / CE
U-Type: UL / CUL / CB / EAC / FCC
E-Type: TUV / CB / EAC / CE
- 3 years warranty



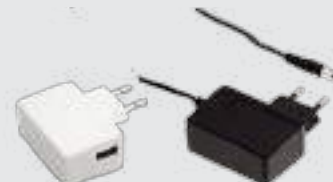
▲ GSM06U
66x 32x 42.5mm



▲ GSM06E
66x 32x 42.5mm



▲ GSM12U-USB ▲ GSM12U
62.2x 45.5x 27.4mm



▲ GSM12E-USB ▲ GSM12E
62.2x 45.5x 27.4mm

6~12W Wall-mounted Type

U/E Type



Order No.	W	□ =	5V	6V	7.5V	9V	12V	15V	18V	24V	48V
GSM06U□-P1J	6	Io(A)	1.2	1	0.8	0.66	0.5	0.4	0.33	0.25	---
GSM06E□-P1J		Eff.(%)	68	74	74	76	77	79	80	82	---
GSM12U□-P1J	12	Io(A)	2.4	---	1.6	1.33	1	0.8	0.66	0.5	0.25
GSM12E□-P1J		Eff.(%)	80	---	82	82	82.5	84	85	85	87

► USB type output for GSM12U / GSM12E 5V model only.

GSM Series



▲ GSM18/25/36U
79x 54x 33mm



▲ GSM60U
75.5x 32x 47.5mm



▲ GSM18/25/36E
79x 54x 33mm



▲ GSM60E
75.5x 32x 47.5mm

18~60W Wall-mounted Type

U/E Type



Order No.	W	□ =	5V	7.5V	9V	12V	15V	18V	24V	48V
GSM18U□-P1J	18	Io(A)	3	2	2	1.5	1.2	1	0.75	0.375
GSM18E□-P1J		Eff.(%)	80	83	84	85	85.5	86	87	88
GSM25U□-P1J	25	Io(A)	4	2.93	2.77	2.08	1.66	1.38	1.04	0.52
GSM25E□-P1J		Eff.(%)	80	83	84	86	86	86	87	88
GSM36U□-P1J	36	Io(A)	4.5	4.32	4	3	2.4	2	1.5	0.75
GSM36E□-P1J		Eff.(%)	80	83	84	86	87	87	87	88
GSM60U□-P1J	60	Io(A)	6	6	5.5	4.5	4	3.33	2.5	1.25
GSM60E□-P1J		Eff.(%)	80	85	87	86	88	88	88	90

Medical / Hospital Grade AC Power Cord

Order No.: YP18+YC12





▲ GSM40/60A
125x 50x 31.5mm

▲ GSM90A
145x 60x 32mm

▲ GSM120A
167x 67x 35mm

▲ GSM160A
175x 72x 35mm

▲ GSM220A
210x 85x 46mm



▲ GSM18/25/36B
79x 54x 33mm

▲ GSM40/60B
125x 50x 31.5mm

▲ GSM90B
145x 60x 32mm

▲ GSM120B
167x 67x 35mm

▲ GSM160B
175x 72x 35mm

▲ GSM220B
210x 85x 46mm

18~220W Desktop Type

A/B Type



Order No.	W	□ =	5V	7.5V	9V	12V	15V	18V	19V	20V	24V	48V
GSM18B□-P1J	18	Io (A)	3	2	2	1.5	1.2	1	---	---	0.75	0.375
		Eff. (%)	80	83	84	85	85.5	86	---	---	87	88
GSM25B□-P1J	25	Io (A)	4	2.93	2.77	2.08	1.66	1.38	---	---	1.04	0.52
		Eff. (%)	80	83	84	86	86	86	---	---	87	88
GSM36B□-P1J	36	Io (A)	4.5	4.32	4	3	2.4	2	---	---	1.5	0.75
		Eff. (%)	80	83	84	86	87	87	---	---	87	88
GSM40A□-P1J	40	Io (A)	5	5.34	4.45	3.34	2.67	2.22	---	---	1.67	0.84
GSM40B□-P1J		Eff. (%)	81	85.5	86	88	88.5	89.5	---	---	90	91
GSM60A□-P1J	60	Io (A)	6	6	6	5	4	3.33	---	---	2.5	1.25
GSM60B□-P1J		Eff. (%)	81.5	86	87.5	88	88.5	89	---	---	90	91.5
GSM90A□-P1M	90	Io (A)	---	---	---	6.67	6	---	4.74	---	3.75	1.87
GSM90B□-P1M		Eff. (%)	---	---	---	88	89	---	89	---	90	91
GSM120A□-R7B	120	Io (A)	---	---	---	8.5	7	---	---	6	5	2.5
GSM120B□-R7B		Eff. (%)	---	---	---	88	89	---	---	89	90	91.5
GSM160A□-R7B	160	Io (A)	---	---	---	11.5	9.6	---	---	8	6.67	3.34
GSM160B□-R7B		Eff. (%)	---	---	---	90	91	---	---	92.5	93	94
GSM220A□-R7B	220	Io (A)	---	---	---	15	13.4	---	---	11	9.2	4.6
GSM220B□-R7B		Eff. (%)	---	---	---	90	90	---	---	92	93.5	94.5

► Energy efficiency Level V for GSM18/25/36/40/60 5~9V models.

GEM Series



Features

- Interchangeable AC plugs (plug kit sold separately)
- Universal input 80~264VAC
- Medical safety approved (2xMOPP) according to AAMI/ANSI ES60601-1 and IEC/EN60601-1 3rd edition
- ANSI/AAMI EN60601-1-11, EN60601-1-11 household medical regulations for Class II unit
- Suitable for BF application with appropriate system consideration
- Low leakage current <100μA
- No load power consumption <0.075W (<0.1W for GEM30I/40I)
- Energy efficiency Level VI (except for GEM40I/60I 5~9V)
- Comply with EISA 2007/DoE and EU ErP
- Protections: Short circuit / Overload / Over voltage
- Working temperature: -25~+70°C by models
- Fully enclosed plastic case
- Optional lock type DC plug
- 3 years warranty



▲ GEM12I
73.9x 39x 48.5mm

▲ GEM18I/30I/40I/60I
75.5x 39.1x 56.2mm

12~60W Interchangeable Wall-mounted Type

I Type



Order No.	W	□ =	5V	7.5V	9V	12V	15V	18V	24V	48V
GEM12I□-P1J	12	Io (A)	2.4	1.6	1.33	1	0.8	0.67	0.5	0.25
		Eff. (%)	80	82	82	82.5	84	85	85	87
GEM18I□-P1J	18	Io (A)	3	---	2	1.5	1.2	1	0.75	0.38
		Eff. (%)	80	---	84	84	84	84	85	87
GEM30I□-P1J	30	Io (A)	4	3.33	3.33	2.5	2	1.66	1.25	0.62
		Eff. (%)	82	86	87	87	87	88	88.5	90
GEM40I□-P1J	40	Io (A)	5	---	4	3.33	2.66	2.22	1.67	0.8
		Eff. (%)	84	---	87	88	88	88	89	90.5
GEM60I□-P1J	60	Io (A)	6	6	5.5	4.5	4	3.33	2.5	1.25
		Eff. (%)	80	85	87	88	88	88	88	90

► USB type output for GEM12I 5V model only

Interchangeable AC Plug Specifically for GEM12I/18I/30I/40I/60I

AC Plug Type and Order No.				
AC Plug-AU2	AC Plug-UK2	AC Plug-EU2	AC Plug-US2	AC Plug-MIX
Australian Type	U.K. Type	European Type	U.S. Type	Mixed Four Type

► The main body unit and AC plug should be ordered separately. The main body needs to be used with any one of the AC plug.

Specific Purpose

OWA Series (60~120W)

GSC Series (18~40W)



OWA Series



Features

- Moistureproof, IP67 protection level
- Universal input 90~264VAC
- Built-in active PFC function(90~120W)
- Constant voltage + Constant current mode
- No load power consumption <0.15W
- Energy efficiency Level VI
- E-Type: EU ErP ; meet CoC Version 5 (OWA-60E/90E)
- U-Type: EISA 2007/DoE and NRCan
- Class II power (without earth pin)
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Fanless design, working temperature: -40~+70°C by models
- Fully enclosed plastic case
- Suitable for general electronics applications at highly dusty or damp environment
- 5 years warranty



	U-Type		E-Type	
AC Input Plug				
DC Output Plug	OWA-60U	OWA-90U/120U	OWA-60E	OWA-90E/120E

60~120W Desktop Type

U/E Type



Order No.	W	□ =	12V	15V	20V	24V	30V	36V	42V	48V	54V
OWA-60U-□	60	Io(A)	5	4	3	2.5	2	1.67	1.5	1.25	1.12
OWA-60E-□		Eff.(%)	88	89	89	90	90	90	90	91	91
OWA-90U-□	90	Io(A)	7.5	6	4.5	3.75	3	2.5	2.15	1.88	1.67
OWA-90E-□		Eff.(%)	89	90	90	90	90	91	91	91	91
OWA-120U-□	120	Io(A)	9.6/10 (E)/(U)	8	6	5	4	3.4	2.9	2.5	2.3
OWA-120E-□		Eff.(%)	87.5	89	90	90.5	90	90	90.5	90.5	90.5

GSC Series



Features

- LED driver, constant current mode
- Universal input 90~277VAC
- No load power consumption <0.15W
- Built-in active PFC function
- Isolation class II, no F.G.
- Protection: Short circuit
- Working temperature: -30~+50°C
- Fully isolated plastic case with IP40 level
- IEC320-C8 or 2 pole EURO plug
- Low cost, high reliability
- Suitable for indoor LED lighting applications
- 3 years warranty



▲ GSC18/25/40B

▲ GSC18/25/40E

79x 54x 33mm

18~40W Desktop Type

B/E Type



Order No.	W	□ =	350mA	500mA	700mA	1050mA	1400mA
GSC18B-□	18	Vo (V)	26~52	18~36	13~26	8~17	6~13
GSC18E-□		Eff. (%)	89	88.5	88.5	87	85.5
GSC25B-□	25	Vo (V)	36~72	26~52	18~36	12~24	9~18
GSC25E-□		Eff. (%)	89.5	89.5	88.5	87.5	86
GSC40B-□	40	Vo (V)	50~100	40~80	29~58	19~38	14~28
GSC40E-□		Eff. (%)	89.5	89.5	88.5	87.5	87



Optional Grayish Model

Optional grayish models (PANTONE Cool Gray 2C) are available for GST18/25/36, GSM18/25/36 and GSC18/25/40 series. MOQ is 200pcs per model. Please contact MEAN WELL sales representatives for more details.

Selection Guide

Industrial



Type	Model		Power (W)	Input (VAC)	Output (VDC)	Dimension (mm)	Key features
	Picture	Series name					
Interchange- able		GE12	12	90~264	5, 7.5, 9, 12, 15, 18, 24	70.7 x 40 x 38.8	<div> Class II</div> <div></div>
		GE18	18		5, 7.5, 9, 12, 15, 18, 24, 48	81 x 43 x 40.5	
		GE24	24				
		GE30	30		12, 15, 18, 24		
Slim		SGA12 U/E-USB	12	90~264	5	62.2 x 27.4 x 39.7	<div> Class II</div> <div></div>
		SGA12U/E	12		5, 7.5, 9, 12, 15, 18, 24, 48	75.5 x 32 x 47.5	
		SGA18U/E	18		5, 9, 12, 15, 18, 24, 48		
		SGA25U/E	25		5, 7.5, 9, 12, 15, 18, 24, 48		
		SGA40U/E/CH	40		5, 9, 12, 15, 18, 24, 48		
		SGA60U/E	60		5, 7.5, 9, 12, 15, 18, 24, 48		
Wall-mounted		GS05 U/E-USB	5	90~264	5	U: 41.86 x 32.76 x 23.8 E: 41.54 x 30.5 x 20	<div> Class II</div> <div></div>
		GS06U/E	6		5, 7.5, 9, 12, 15, 18, 24, 48	66 x 32 x 42.5	
		GS15U/E	15		5, 7.5, 9, 12, 15, 18, 24, 48	71 x 34 x 50	
		GST18U/E	18	85~264	5, 7.5, 9, 12, 15, 18, 24, 28, 48	79 x 54 x 33	<div> Class II</div> <div></div> <div>Global safety certificates</div>
		GST25U/E	25				
		GST36U/E	36		5, 9, 12, 24, 48		

Selection Guide

Industrial



















Type	Model		Power (W)	Input (VAC)	Output (VDC)	Dimension (LxWxH) (mm)	Key features
	Picture	Series name					
Desktop		GS15A/B	15	90~264	5, 7.5, 9, 12, 15, 18, 24, 48	100 x 58.5 x 32.8	 Class I (A-Type)  Class II (B-Type) 
		GST18A/B	18	85~264	5, 7.5, 9, 12, 15, 18, 24, 28, 48	A: 93 x 54 x 36 B: 79 x 54 x 33	 Class I (A-Type)  Class II (B-Type)  Global safety certificates
		GST25A/B	25		5, 9, 12, 24, 48		
		GST36B	36		5, 9, 12, 24, 48		
		GST40A	40	90~264	5, 7.5, 9, 12, 15, 18, 24, 48	125 x 50 x 31.5	 Class I (A-Type)  Class II (B-Type)  Global safety certificates
		GST60A	60		12, 15, 19, 24, 48	145 x 60 x 32	
		GST90A	90		12, 15, 20, 24, 36, 48	175 x 72 x 35	
		GST120A	120	85~264	(36V for GST160A only)	210 x 85 x 46	
		GST160A	160			220 x 95 x 46	
		GST220A	220				
		GST280A	280				
		GP25A/B	25	90~264	5/12/-5, 5/12/-12, 5/15/-15, 16/48/-16	107.5 x 67 x 36	 Class I (A-Type)  Class II (B-Type)  Triple Output
		GP50A	50			146 x 75.5 x 43	

Selection Guide

Medical



Type	Model		Power (W)	Input (VAC)	Output (VDC)	Dimension (LxWxH) (mm)	Key features
	Picture	Series name					
Interchange-able		GEM12I	12	80~264	5, 7.5, 9, 12, 15, 18, 24, 48	73.9 x 39 x 48.5	   
		GEM18I	18		5, 9, 12, 15, 18, 24, 48	75.5 x 39.1 x 56.2	
		GEM30I	30		5, 7.5, 9, 12, 15, 18, 24, 48		
		GEM40I	40		5, 9, 12, 15, 18, 24, 48		
		GEM60I	60		5, 7.5, 9, 12, 15, 18, 24, 48		
Wall-mounted		GSM06U/E	6	80~264	5, 6, 7.5, 9, 12, 15, 18, 24	66 x 32 x 42.5	    (6W and 18~36W 5~9V for Level V)
		GSM12U/E	12		5, 7.5, 9, 12, 15, 18, 24, 48	62.2 x 27.4 x 45.5	
		GSM18U/E	18			79 x 54 x 33	
		GSM25U/E	25				
		GSM36U/E	36				
		GSM60U/E	60				
Desktop		GSM18B	18	80~264	5, 7.5, 9, 12, 15, 18, 24, 48	79 x 54 x 33	  (except for 40~220W A-Type)  Class I (A-Type)  Class II (B-Type)  (18~60W 5~9V for Level V)
		GSM25B	25				
		GSM36B	36				
		GSM40A/B	40		5, 7.5, 9, 12, 15, 18, 24, 48	125 x 50 x 31.5	
		GSM60A/B	60				
		GSM90A/B	90		12, 15, 19, 24, 48	145 x 60 x 32	
		GSM120A/B	120		12, 15, 20, 24, 48	167 x 67 x 35	
		GSM160A/B	160			175 x 72 x 35	
		GSM220A/B	220			210 x 85 x 46	

Specific Purpose



Type	Model		Power (W)	Input (VAC)	Output (VDC)	Dimension (LxWxH) (mm)	Key features
	Picture	Series name					
Moisture proof		OWA-60U/E	60	90~264 (180~264 for OWA-120E)	12, 15, 20, 24, 30, 36, 42, 48, 54	130 x 53 x 35	 IP67 for power body
		OWA-90U/E	90			171 x 63 x 37.5	
		OWA-120U/E	120			191 x 63 x 37.5	
LED Lighting		GSC18B/E	18	90~277	350, 500, 700, 1050, 1400 mA	79 x 54 x 33	 Constant current output mode, IP40 design
		GSC25B/E	25				
		GSC40B/E	40				

GST Global Certification Chart



Country	Safety	GST18 (A/B/U/E)	GST25 (A/B/U/E)	GST36 (B/U/E)	GST 40A	GST 60A	GST 90A	GST 120A	GST 160A	GST 220A	GST 280A
IEC	CB IEC62368-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
US/Canada	 UL62368-1	✓ (A/B/U)	✓ (A/B/U)	✓ (B/U)	✓	✓	✓	✓	✓	✓	✓
Europe	 TUV EN62368-1	✓ (A/B/E)	✓ (A/B/E)	✓ (B/E)	✓	✓	✓		✓	✓	✓
Taiwan	 BSMI CNS14336	✓ (A/B/U)	✓ (A/B/U)	✓ (B/U)	✓	✓	✓	✓	✓	✓	✓
China	 CCC GB4943	✓ (A/B)	✓ (A/B)	✓ (B)	✓	✓	✓	✓	✓	✓	✓
Japan	 PSE 60950.1	✓ (A/B)	✓ (A/B)	✓ (B)	✓	✓	✓	✓	✓	✓	✓
Australia / New Zealand	 AS/NZS 60950.1	✓ (A/B)	✓ (A/B)	✓ (B)	✓	✓	✓	✓	✓	✓	✓
Korea	 KC K60950-1	✓ (A/B)	✓ (A/B)	✓ (B)	✓	✓	✓	✓	✓	✓	✓
Malaysia	 SIRIM MS IEC60950-1 (Optional)	✓ (A/B/E)	✓ (A/B/E)	✓ (B/E)	✓	✓	✓	✓	✓	✓	✓
India	 BIS IS13252	✓ (A/B)	✓ (A/B)	✓ (B)	✓	✓	✓	✓	✓	✓	✓
Russia/ Belarus/ Kazakhstan/ Kyrgyzstan/ Armenia	EAC EAC TP TC004/020	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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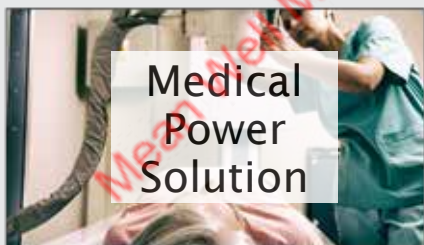
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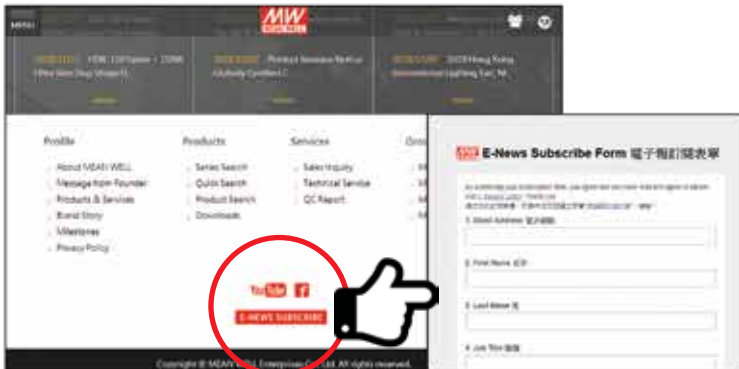
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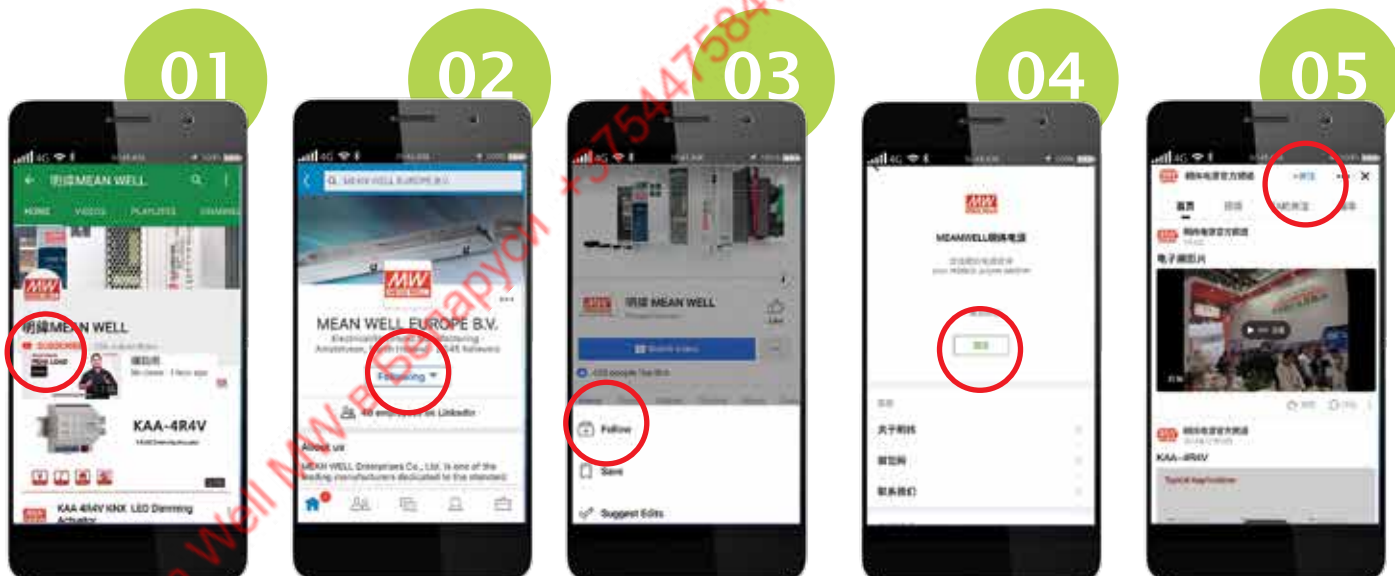
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