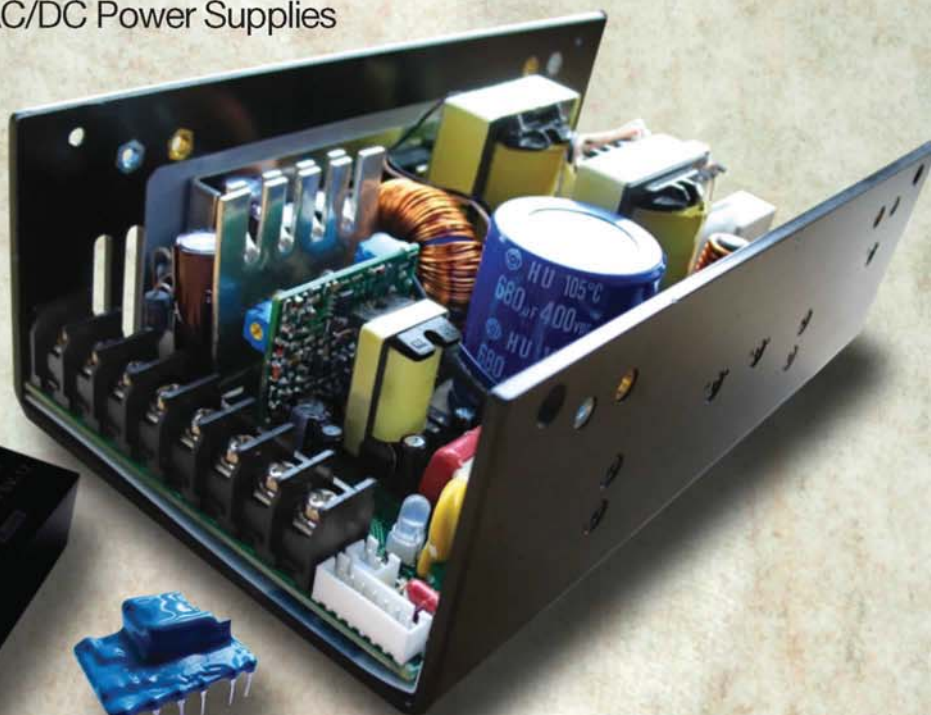




# Power Products

AC/DC Power Supplies



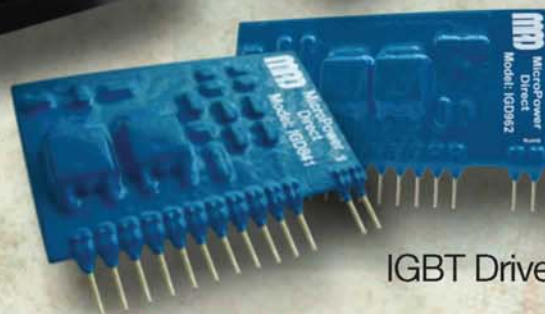
DC/DC Converters



Switching POL Regulators



LED Drivers



IGBT Drivers

# MicroPower Direct Product Guide

# MicroPower Direct

**MicroPower Direct (MPD)** was founded in 1999. Since then, our steady growth has been driven by a commitment to delivering innovative, high quality power conversion products at the lowest possible prices. We currently offer well over 5,000, standard high performance power conversion products.

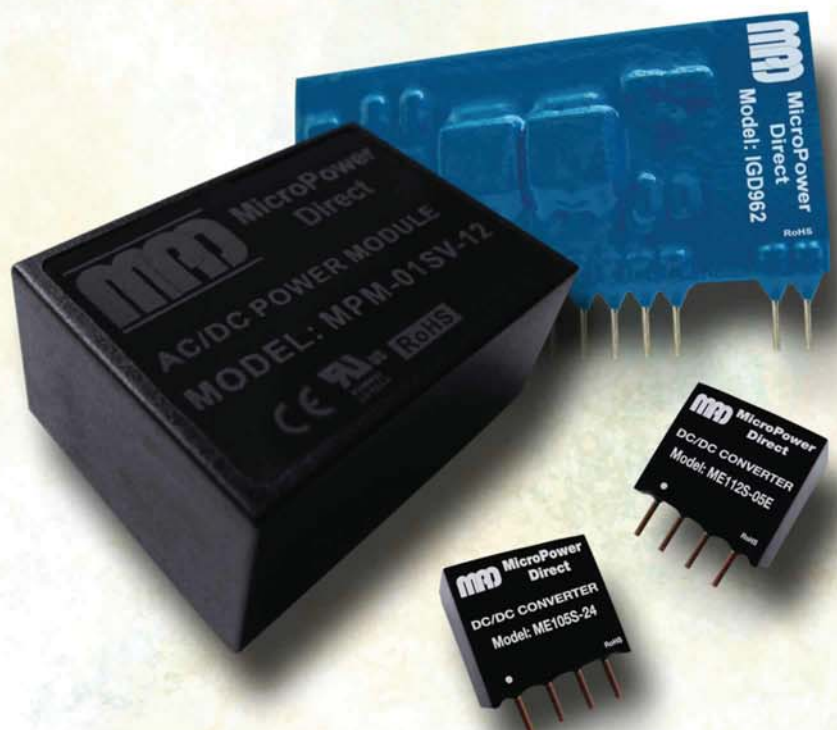
**MPD** product lines include over 2,500 standard DC/DC converters; over 2,000 standard AC/DC switching power supplies; a wide line of constant current output, DC/DC LED drivers; low cost POL switching regulators and high current hybrid IGBT drivers.

New product families in each product category are being added on a regular basis. With this brochure we are introducing a line of AC/DC power supplies and DC/DC converters that are approved to the rigorous standards of EN 60601 medical standards. We are also including the new "MPV" series. These compact DC/DC converters provide the very wide range, high voltage inputs & high isolation levels required by a variety of industrial control and energy generation applications.

Component selection and layout are carefully considered at the design stage to optimize product reliability. All manufacturing takes place in ISO 9000 registered factories under strict quality control system guidelines. All products are supported worldwide, and now carry a standard three year warranty.

We don't just want your business, we want to EARN your business. Check out our wide product selection. Call **MPD** today

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# For New Power Products Go Direct!

## MPU-400CS - 400W AC/DC Power Supplies

The MPU-400CS is a new family of compact, 400W AC/DC switching power supplies. Packaged in a low profile U-Channel chassis, features include high efficiency, active PFC, and EN 60950 approval. Options available include a cover & current share capability.

- Active Power Factor Correction
- EN 60950 Approved
- Compact U-Channel Case
- 700W Peak Power

## MR2011S - 20W Railway DC/DC Converters

The MR2011S is a family of 20W DC/DC's specifically designed for railway & transit applications. Features include a wide input range, high efficiency and a compact 1 x 2" case with industry standard pin-out.

- 20W Output Power
- 40 - 160 VDC Input Range
- Meets EN 50155, EN 60950
- Chassis & DIN Rail Mounting

Also, see our low cost photovoltaic, automotive, medical, motor control, green power & DIN rail power products here or for full data on the MPD website.

## LDM24-xxx - Constant Current LED Drivers

The LDM24 is a family of compact, constant current output DC/DC LED drivers. Standard features include high output current, wide input voltage range, and digital or analog dimming. Packaging is a miniature "MiniDIP" case.

- 0.5 - 0.7A Constant Current Out
- Efficiency to 95%
- PWM and Analog Dimming
- Wide 7V to 30V Input Range

## IG480-xxRW - DC/DC's for IGBT Drivers

The IG480 high isolation DC/DC converters are specifically designed for use with IGD962 IGBT drivers. They provide the high isolation, fault protection, and the unbalanced outputs (+15V/-9V) required by these commonly used driver circuits. All at very low cost.

- Built-In High CMRR Opto-Coupler
- 3,750 VAC Isolation
- Short Circuit Protected
- Compact SIP Packaging

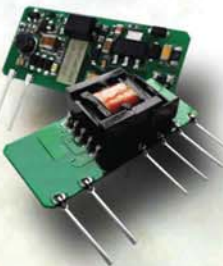
You will find many more new products available on the MPD website. For a surprisingly quick and low cost quotation visit us online. For pricing, full technical datasheets, product samples, application notes or to send technical/sales inquiries; go to:

# [www.micropowerdirect.com](http://www.micropowerdirect.com)



# AC/DC Power Supplies

Model	Power (W)	Input Voltage (VAC)		PFC	Output (VDC)			I/O Isolation (kVAC)	Case Type
		Range	Type		Single	Dual	Triple		
MPL-01SE	1.0	85 to 264	Universal	No	5, 9, 12, 15, 24			3.00	SIP
<b>NEW</b> MPL01SEUP	1.0	85 to 264	Universal	No	5, 9, 12, 15, 24			3.00	Open SIP
MPM-01V	1.0	85 to 305	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	Module
MPM-02V	2.0	85 to 305	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	Module
MPL-03SE	3.0	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	SIP
<b>NEW</b> MPL-03SEUP	3.0	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	Open SIP
MPM-03S	3.0	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	DIP
MPM-04V	4.0	90 to 305	Universal	No	3.3, 5, 8, 9, 12, 15, 24	5/3.3, 8/5, 12/5		3.00	Module
MPL-05SE	5.0	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	SIP
<b>NEW</b> MPL-05SEUP	5.0	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	Open SIP
MPM-05S	5.0	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	Module
MPM-05PB	5.0	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24			4.00	Module
MPM-08MB	8.0	90 to 305	Universal	No	3.3, 5, 9, 12, 15, 24	±12, ±15		4.00	Module
MPM-10x	10	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24	±5, ±12, ±15, ±24		3.00	Module
MPM-10EPB	10	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	Module
MPM-12EPB	12	85 to 264	Universal	No	3.3, 5, 12, 15, 24			3.00	Module
MPM-15S	15	85 to 264	Universal	No	3.3, 5, 12, 15, 24, 48			3.00	Module
MPM-15IS	15	85 to 265	Universal	No	5, 12, 15, 24, 48	±12, ±15	5/±12, 5/±15	3.00	Module
MPM-15CM	15	85 to 265	Universal	No	5, 12, 15, 24, 48	±12, ±15	5/±12, 5/±15	3.00	Chassis
MPM-20	20	85 to 264	Universal	No	3.3, 5, 12, 15, 24			3.00	Module
MPM-20EPB	20	85 to 264	Universal	No	3.3, 5, 12, 15, 24			3.00	Module
MPM-25S	25	85 to 264	Universal	No	5, 12, 15, 24, 48			3.00	Module
MPM-30IS	30	85 to 265	Universal	No	5, 12, 15, 24, 48	±12, ±15	5/±12, 5/±15, 5/3.3/12	3.00	Module
MPM-30CM	30	85 to 265	Universal	No	5, 12, 15, 24, 48	±12, ±15	5/±12, 5/±15, 5/3.3/12	3.00	Chassis
MPM-40X	40	90 to 264	Universal	No	3.3, 5, 9, 12, 15, 24	±5, ±12, ±15, 5/12	5/±12, 5/±15	3.00	Module
MPM-60PB	60	85 to 264	Universal	No	5, 9, 12, 15, 24, 48			3.00	Module
<b>NEW</b> MPM-60S	60	85 to 264	Universal	No	5.1, 12, 15, 24, 36, 48			3.00	Module
<b>NEW</b> MPU-240D	240	90 to 264	Universal	Active		5/12, 5/24, 5/48, 12/24		3.00	U-Channel
MPU-250S	250	90 to 264	Auto-Range	Pass	12, 15, 24, 36			3.00	U-Channel
MPU-250F	250	90 to 264	Auto-Range	Pass	12, 15, 24, 36			3.00	U-Channel
<b>NEW</b> MPU-250D	250	90 to 264	Auto-Range	Pass		5/12, 5/24, 5/48, 12/24		3.00	U-Channel
MPU-300S	300	90 to 264	Universal	Active	12, 15, 24, 48			3.00	U-Channel
MPU-300SF	300	90 to 264	Universal	Active	12, 15, 24, 48			3.00	End Fan
<b>NEW</b> MPU-300D	300	90 to 264	Auto-Range	Pass		5/12, 5/24, 5/48, 12/24		3.00	U-Channel
MPU-400S	400	90 to 264	Universal	Active	12, 24, 48			3.00	U-Channel
MPU-400SE	400	90 to 264	Universal	Active	12, 24, 48			3.00	End Fan
MPU-400SF	400	90 to 264	Universal	Active	12, 24, 48			3.00	Top Fan
<b>NEW</b> MPU-400CS	400	90 - 264	Universal	Active	12, 24, 48			3.00	U-Channel
MPU-400D	400	90 - 264	Universal	Active	12, 24, 48			3.00	U-Channel





Model	Power (W)	Input Voltage (VAC)		PFC	Output (VDC)			I/O Isolation (kVAC)	Case Type
		Range	Type		Single	Dual	Triple		
<b>NEW</b> MPU-400CSI	400	90 - 264	Universal	Active	12, 24, 48			3.00	U-Channel
<b>NEW</b> MPU-400DCS	400	90 - 264	Universal	Active		3.3/12, 3.3/24, 5/12, 5/24, 2/24		3.00	U-Channel
MPU-500S	500	90 - 264	Universal	Active	12, 24, 48			3.00	U-Channel
MPU-500SE	500	90 - 264	Universal	Active	12, 24, 48			3.00	End Fan
MPU-600S	600	90 - 264	Universal	Active	12, 24, 48			3.00	U-Channel
MPU-600SE	600	90 - 264	Universal	Active	12, 24, 48			3.00	End Fan
MPU-800S	800	180 - 264	---	Active	12, 24, 48			3.00	U-Channel



## Green AC/DC's



Model	Power (W)	Input Voltage (VAC)		PFC	Output (VDC)			I/O Isolation (kVAC)	Case Type
		Range	Type		Single	Dual	Triple		
<b>NEW</b> MPG-03S	3.0	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24			3.00	Module
MPM-04E	4.0	85 to 264	Universal	No	3.3, 5, 9, 12, 15, 24	±12, ±15, 5/3.3, 12/5		3.00	Module
MPM-07PB	7.0	85 to 265	Universal	No	5, 9, 12, 15, 24			3.00	Open SIP
MPM-10IS	10	85 to 265	Universal	No	5, 9, 12, 15, 24			3.00	Module
MPM-10PB	10	85 to 264	Universal	NO	3.3, 5, 12, 15, 24			3.00	Module
MPG-60x	60	85 to 264	Universal	NO	12, 24, 48	5/12, 5Vsb (opt)		3.00	Open Frame
MPG-100S	100	85 to 264	Universal	NO	12, 24, 48	5Vsb (opt)		3.00	Open Frame
MPG-120S	120	85 to 264	Universal	Active	12, 24, 48	5Vsb (opt)		3.00	Open Frame



## DIN Rail AC/DC's

Model	Power (W)	Input Voltage (VAC)		PFC	Output (VDC)			I/O Isolation (kVAC)	Case Type
		Range	Type		Single	Dual	Triple		
MDR-24S	24	90 to 264	Universal	No	5, 12, 24			3.00	SIP
<b>NEW</b> MDR-72S	72	165 to 264	---	No	24			3.00	Open SIP
<b>NEW</b> MDR-120S	120	85 to 264	Universal	No	24			3.00	Module

Many of our standard AC/DC and DC/DC modules are available on DIN rail (and chassis) mounting adapters. Contact the factory for complete information.



## Constant Power AC/DC's

Model	Power (W)	Input Voltage (VAC)		PFC	Output (VDC)			I/O Isolation (kVAC)	Case Type
		Range	Type		Single	Dual	Triple		
<b>NEW</b> MCP-02S	2.0	85 to 264	Universal	No	8, 14, 24	8/3.3, 8/5, 14/3.3, 14/5		3.00	Module



# DC/DC Converters

Series	Power (W)	Input Voltage (VDC)		No. of Outputs	Output Voltages											I/O Iso (kVDC)	Case Type		
		Nominal	Range		3.3	5.0	9.0	12	15	18	24	±3.3	±5.0	±9.0	±12			±15	±24
ME05S	0.5	3.3, 5, 12, 24, 48	±10%	1	x	x	x	x	x	x	x							1.0	4-SIP
ME05SI	0.5	3.3, 5, 12, 24, 48	±10%	1	x	x	x	x	x	x	x							3.0	4-SIP
A100EHI	1.0	5, 12	±10%	1, 2		x	x	x	x				x	x	x	x		6.0	DIP
A100UHI	1.0	12	±10%	1, 2				x						x				12.0	DIP
MD100x	1.0	3.3, 5, 12, 15, 24, 48	±10%	1, 2	x	x	x	x	x	x	x	x	x	x	x	x	x	1.0	7-SIP
MD100xl	1.0	3.3, 5, 12, 15, 24, 48	±10%	1, 2	x	x	x	x	x	x	x	x	x	x	x	x	x	3.0	7-SIP
MD100x14	1.0	3.3, 5, 12, 15, 24, 48	±10%	1, 2	x	x	x	x	x	x	x	x	x	x	x	x	x	4.0	7-SIP
MD100x15	1.0	3.3, 5, 12, 15, 24, 48	±10%	1, 2	x	x	x	x	x	x	x	x	x	x	x	x	x	5.0	7-SIP
MD100x16	1.0	3.3, 5, 12, 15, 24, 48	±10%	1, 2	x	x	x	x	x	x	x	x	x	x	x	x	x	6.0	7-SIP
<b>NEW</b> MD100xE	1.0	3.3, 5, 12, 15, 24	±10%	1, 2	x	x	x	x	x			x	x	x	x	x	x	1.0	7-SIP
<b>NEW</b> MD100xEI	1.0	3.3, 5, 12, 15, 24	±10%	1, 2	x	x	x	x	x			x	x	x	x	x	x	3.0	7-SIP
MD100SER	1.0	5, 12, 15, 24	±5%	1		x	x	x	x			x						1.0	7-SIP
MD100DER	1.0	5, 12, 24	±5%	2									x	x	x	x		1.0	7-SIP
MD100EHI	1.0	5, 12, 15, 24	±10%	1, 2	x	x	x	x	x			x	x	x	x	x		6.0	7-SIP
<b>NEW</b> MD100RW	1.0	5, 12, 24, 48	2:1	1, 2		x		x	x			x			x	x		1.5	6-SIP
MD100ERW	1.0	5, 12, 24, 48	2:1	1, 2	x	x	x	x	x			x		x	x	x		1.5	8-SIP
<b>NEW</b> MD100VHI	1.0	5, 12, 15, 24	±10%	1, 2	x	x	x	x	x			x	x	x	x			5.2	7-SIP
ME100S	1.0	3.3, 5, 12, 24, 48	±10%	1	x	x	x	x	x	x	x							1.0	4-SIP
ME100SE	1.0	3.3, 5, 12, 15, 24	±10%	1		x	x	x	x			x						1.5	4-SIP
ME100SI	1.0	3.3, 5, 12, 24, 48	±10%	1	x	x	x	x	x	x	x							3.0	4-SIP
E100EI	1.0	3.3, 5, 12, 24	±10%	1	x	x	x	x	x									3.0	4-SIP
G100E	1.0	5, 12, 24	±10%	1, 2		x	x	x	x				x	x	x	x		1.0	MiniDIP
MG100EI	1.0	3.3, 5, 12, 15, 24	±10%	1, 2	x	x		x	x			x	x		x	x	x	3.0	MiniDIP
MH100SE	1.0	3.3, 5, 12, 15, 24	±10%	1	x	x	x	x	x			x						1.5	MiniDIP
H100EI	1.0	3.3, 5, 12, 24	±10%	1	x	x	x	x	x									3.0	MiniDIP
ML100S	1.0	5, 12, 15, 24	±10%	1	x	x	x	x	x									1.5	SMT
ML100SE	1.0	3.3, 5, 12, 15, 24	±10%	1	x	x	x	x	x			x						1.5	SMT
ML100SEI	1.0	5, 12, 15, 24	±10%	1		x	x	x	x			x						3.0	SMT
ML100D	1.0	5, 12, 24	±10%	2		x		x	x						x	x		1.5	SMT
LF100ED	1.0	3.3, 5, 12	±10%	1									x	x	x	x		1.0	SMT
<b>NEW</b> ML100DEI	1.0	5, 12, 24	±10%	2									x	x	x	x	x	3.0	SMT
<b>NEW</b> ML100RW	1.0	5, 12, 24, 48	2:1	1, 2		x		x	x					x	x			1.5	SMT
ML100SER	1.0	5, 12, 15, 24	±10%	1		x	x	x	x									1.0	SMT
A100HI	1.5	5, 12, 15	±10%	1, 2		x		x	x				x		x	x		8.0	DIP
MA100RW	1.5	5, 12, 24, 48	2:1	1, 2		x	x	x	x			x	x	x	x	x	x	1.5	DIP
MA100RWI	1.5	5, 12, 24, 48	2:1	1, 2		x	x	x	x			x	x	x	x	x	x	3.0	DIP
A100ERU	1.5	24, 48	4:1	1, 2	x	x	x	x	x				x		x	x		1.5	DIP
MA100RU	1.5	24, 48	4:1	1, 2		x	x	x	x			x	x	x	x	x		1.5	DIP
MA100RUI	1.5	24, 48	4:1	1, 2		x	x	x	x			x	x	x	x	x		3.0	DIP



Series	Power (W)	Input Voltage (VDC)		No. of Outputs	Output Voltages											I/O Iso (kVDC)	Case Type				
		Nominal	Range		3.3	5.0	9.0	12	15	18	24	±3.3	±5.0	±9.0	±12			±15	±24		
A200EHI	2.0	5, 12	±10%	1, 2	*	*	*	*							*	*	*	*		6.0	DIP
A200RHI	2.0	5, 12, 24	±10%	1, 2	*		*	*							*		*	*		6.0	DIP
MA200RW	2.0	5, 12, 24, 48	2:1	1, 2	*	*	*	*				*			*	*	*	*	*	1.5	DIP
MA200RWI	2.0	5, 12, 24, 48	2:1	1, 2	*	*	*	*				*			*	*	*	*	*	3.0	DIP
MA200RU	2.0	24, 48	4:1	1, 2	*	*	*	*				*			*	*	*	*	*	1.5	DIP
MA200RUI	2.0	24, 48	4:1	1, 2	*	*	*	*				*			*	*	*	*	*	3.0	DIP
MD200E	2.0	5, 9, 12, 15, 24	±10%	1, 2	*	*	*	*	*					*	*	*	*	*		1.5	7-SIP
MD200EI	2.0	5, 12, 15, 24	±10%	1, 2		*		*	*				*		*		*	*	*	3.0	7-SIP
NEW MD200RU	2.0	12, 24, 48	4:1	1, 2	*	*		*	*						*		*	*		1.5	8-SIP
D200ERU	2.0	24, 48	4:1	1, 2	*	*	*	*	*						*	*	*	*		1.5	9-SIP
E200E	2.0	5, 12	±10%	1		*		*	*											1.0	4-SIP
E200I	2.0	5, 12, 24, 48	±10%	1	*	*	*	*	*											3.0	4-SIP
MG200E	2.0	3.3, 5, 12, 24	±10%	1, 2		*	*	*	*			*			*	*	*	*		1.5	MiniDIP
MG200EI	2.0	5, 12, 15, 24	±10%	1, 2		*	*	*	*						*		*	*		3.0	MiniDIP
ML200S	2.0	5, 12, 24	±10%	1		*		*												1.0	SMT
ML200SE	2.0	5, 12, 15, 24	±10%	1	*	*	*	*	*			*								1.5	SMT
ML200SEI	2.0	5, 12, 15, 24	±10%	1	*	*	*	*	*			*								3.0	SMT
ML200D	2.0	5, 12, 24	±10%	2											*	*	*	*		1.0	SMT
LF200RW	2.0	5, 12, 24, 48	2:1	1, 2	*	*		*	*						*		*	*		1.5	SMT
NEW MA300R	3.0	5, 12, 24	2:1	1, 2	*	*		*	*			*					*	*		1.5	SMT
MA300RW	3.0	5, 12, 24, 48	2:1	1, 2	*	*		*	*			*			*		*	*		1.5	DIP
NEW MA300ERW	3.0	5, 12, 24, 48	2:1	1, 2	*	*		*	*			*			*	*	*	*		1.5	DIP
MA300RWI	3.0	5, 12, 24, 48	2:1	1, 2		*	*	*	*			*			*	*	*	*		3.0	DIP
NEW MA300ERWI	3.0	5, 12, 24, 48	2:1	1, 2	*	*		*	*			*			*	*	*	*		3.0	DIP
MA300RU	3.0	24, 48	4:1	1, 2	*	*		*	*			*			*		*	*		1.5	DIP
MA300ERU	3.0	24, 48	4:1	1	*	*	*	*	*			*								1.5	DIP
MA300RUI	3.0	24, 48	4:1	1, 2	*	*		*	*			*			*		*	*		3.0	DIP
MA300ED	3.0	5, 12, 24, 48	2:1	2 (Iso)											*	*	*	*	*	1.5	DIP
MD300S	3.0	5, 12, 24	±10%	1		*		*	*			*								1.5	7-SIP
NEW MD300ERW	3.0	5, 12, 24, 48	2:1	1, 2	*	*	*	*	*			*			*		*	*		1.5	8-SIP
D300RU	3.0	12, 24, 48	4:1	1, 2	*	*		*	*						*		*	*		1.6	8-SIP
NEW ML300ERW	3.0	12, 24, 48	2:1	1	*	*		*	*											1.5	* SMT
NEW ML300RU	3.0	24, 48	4:1	1, 2	*	*		*	*			*			*		*	*		1.5	SMT
MA400RW	4.0	12, 24, 48	2:1	1, 2		*	*	*	*			*			*	*	*	*	*	1.5	DIP
MA400RWI	4.0	5, 12, 24, 48	2:1	1, 2		*	*	*	*			*			*	*	*	*	*	3.0	DIP
MA400RU	4.0	24, 48	4:1	1, 2	*	*		*	*			*			*		*	*		1.5	DIP
MA400RUI	4.0	24, 48	4:1	1, 2	*	*		*	*			*			*		*	*		3.0	DIP
MA500RW	5.0	12, 24, 48	2:1	1, 2		*	*	*	*			*			*	*	*	*	*	1.5	DIP
MA500RWI	5.0	5, 12, 24, 48	2:1	1, 2		*	*	*	*			*			*	*	*	*	*	3.0	DIP





Series	Power (W)	Input Voltage (VDC)		No. of Outputs	Output Voltages											I/O Iso (kVDC)	Case Type	
		Nominal	Range		3.3	5.0	9.0	12	15	18	24	±3.3	±5.0	±9.0	±12			±15
MA500RU	5.0	24, 48	4:1	1, 2	*	*		*	*					*	*	*	1.5	DIP
MA500RUI	5.0	24, 48	4:1	1, 2	*	*		*	*					*	*	*	3.0	DIP
LF500RW	5.0	12, 24, 48	2:1	1, 2	*	*		*	*					*	*	*	1.5	SMT
LF500RU	5.0	24, 48	4:1	1, 2	*	*		*	*					*	*	*	1.5	SMT
MA600RW	6.0	12, 24, 48	2:1	1, 2	*	*		*	*		*			*	*	*	1.5	DIP
<b>NEW</b> MA600ERW	6.0	12, 24, 48	2:1	1, 2	*	*	*	*	*		*			*	*	*	1.5	DIP
MA600RUI	6.0	12, 24, 48	2:1	1, 2	*	*		*	*		*			*	*	*	3.0	DIP
<b>NEW</b> MA600ERUI	6.0	5, 12, 24, 48	2:1	1, 2		*		*	*					*	*	*	3.0	DIP
MA600RU	6.0	24, 48	4:1	1, 2	*	*		*	*		*			*	*	*	1.5	DIP
MA600ERU	6.0	24, 48	4:1	1, 2	*	*		*	*					*	*	*	1.5	DIP
MA600RUI	6.0	24, 48	4:1	1, 2	*	*		*	*		*			*	*	*	3.0	DIP
MA600ERUI	6.0	24, 48	4:1	1		*		*	*		*						3.0	DIP
<b>NEW</b> MD600RW	6.0	5, 12, 24, 48	2:1	1, 2	*	*	*	*	*		*			*	*	*	1.5	8-SIP
<b>NEW</b> MD600RUI	6.0	5, 12, 24, 48	2:1	1, 2	*	*	*	*	*		*			*	*	*	3.0	8-SIP
<b>NEW</b> MI600ERW	6.0	12, 24, 48	2:1	1, 2	*	*		*	*		*			*	*	*	1.5	1 x 1"
<b>NEW</b> MI600ERU	6.0	24, 48	4:1	1, 2	*	*		*	*		*			*	*	*	1.5	1 x 1"
<b>NEW</b> ML600RU	6.0	24, 48	4:1	1, 2	*	*		*	*		*			*	*	*	1.5	SMT
MA800RW	8.0	12, 24, 48	2:1	1, 2	*	*		*	*					*	*	*	1.5	DIP
MA1000RW	10	12, 24, 48	2:1	1, 2	*	*		*	*						*	*	1.5	DIP
MB1000ERW	10	12, 24, 48	2:1	1, 2		*		*	*					*	*	*	1.5	1 x 2"
MB1000ERU	10	24, 48	4:1	1, 2	*	*		*	*		*			*	*	*	1.5	1 x 2"
I1000RU	10	24, 48	4:1	1, 2	*	*		*	*					*	*	*	1.5	1 x 1"
A1200RU	12	24, 48	4:1	1, 2	*	*		*	*					*	*	*	1.6	DIP
A1500RW	15	12, 24, 48	2:1	1, 2	*	*		*	*					*	*	*	1.6	DIP
A1500RU	15	24, 48	4:1	1, 2	*	*		*	*					*	*	*	1.6	DIP
B1500RW	15	12, 24, 48	2:1	1, 2	*	*		*	*						*	*	1.5	1 x 2"
MB1500ERW	15	12, 24, 48	2:1	1, 2	*	*		*	*		*			*	*	*	1.5	1 x 2"
B1500RU	15	24, 48	4:1	1, 2	*	*		*	*					*	*	*	1.5	1 x 2"
MB1500ERU	15	24, 48	4:1	1, 2	*	*		*	*		*			*	*	*	1.5	1 x 2"
MB2000ERW	20	12, 24, 48	2:1	1, 2	*	*		*	*		*			*	*	*	1.5	1 x 2"
MB2000ERU	20	24, 48	4:1	1, 2	*	*	*	*	*		*			*	*	*	1.5	1 x 2"
B2000RUI	20	24, 48	4:1	1, 2	*	*		*	*					*	*	*	2.5	1 x 2"
F2000ERW	20	12, 24, 48	2:1	1, 2	*	*		*	*		*			*	*	*	1.5	2 x 1.6"
F2500RW	25	12, 24, 48	2:1	1, 2	*	*		*	*					*	*		1.5	2 x 1.6"
F2500RU	25	24, 48	4:1	1, 2	*	*		*	*					*	*		1.5	2 x 1.6"
MI2500RW	25	12, 24, 48	2:1	1, 2	*	*		*	*					*	*		1.5	1 x 1"
MI2500RU	25	24, 48	4:1	1, 2	*	*		*	*					*	*		1.5	1 x 1"
MB3000ERW	30	24, 48	2:1	1	*	*	*	*	*		*						1.5	1 x 2"
MF3000ERU	30	24, 48	4:1	1, 2		*		*	*		*			*	*	*	1.5	2 x 1.6"





Series	Power (W)	Input Voltage (VDC)		No. of Outputs	Output Voltages											I/O Iso (kVDC)	Case Type		
		Nominal	Range		3.3	5.0	9.0	12	15	18	24	±3.3	±5.0	±9.0	±12			±15	±24
MB4000RW	40	12, 24, 48	2:1	1, 2	x	x		x	x		x				x	x		1.5	1 x 2"
MB4000RU	40	24, 48	4:1	1, 2	x	x		x	x		x				x	x		1.5	1 x 2"
<b>NEW</b> MB5000ERW	50	24, 48		1	x	x		x	x		x							1.5	1 x 2"
MB5000RW	50	12, 24, 48	2:1	1	x	x		x	x		x		x		x	x		1.5	1 x 2"
MB5000RU	50	24, 48	4:1	1	x	x		x	x		x							1.5	1 x 2"
<b>NEW</b> C6000RU	60	24, 48	4:1	1	x	x		x	x									1.5	2 x 2"

## Automotive DC/DC's

Series	Power (W)	Input Voltage (VDC)		No. of Outputs	Output Voltages											I/O Iso (kVDC)	Case Type		
		Nominal	Range		3.3	5.0	9.0	12	15	18	24	±3.3	±5.0	±9.0	±12			±15	±24
MCH100S	1.0	5.0	±10%	1		x												1.5	1 x 1"
MCL100S	1.0	5.0	±10%	1		x												1.5	SMT
MCL100SI	1.0	5.0	±10%	1		x												3.5	SMT

## Railway DC/DC's

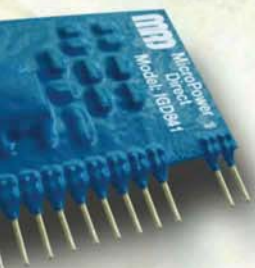
Series	Power (W)	Input Voltage (VDC)		No. of Outputs	Output Voltages											I/O Iso (kVDC)	Case Type		
		Range	Nom.		3.3	5.0	9.0	12	15	18	24	±3.3	±5.0	±9.0	±12			±15	±24
MR0611S	6.0	40 - 160	110	1		x		x	x		x							1.5	1 x 1"
MR1011S	10	40 - 160	110	1		x		x	x		x							1.5	1 x 2"
MR1511S	15	40 - 160	110	1	x	x		x	x		x							1.5	1 x 2"
MR2011S	20	40 - 160	110	1		x		x	x		x							1.5	1 x 2"
MR50SRW	50	40 - 101, 66 - 160	72, 110	1		x		x	x		x							1.5	¼ Brick
MR75SRW	75	40 - 101, 66 - 160	72, 110	1		x		x	x		x							1.5	¼ Brick
MR100S	100	66 - 160	110	1				x	x		x							3.0	Module

## Photovoltaic DC/DC's

Series	Power (W)	Input Voltage (VDC)		No. of Outputs	Output Voltages											I/O Iso (kVDC)	Case Type		
		Range	Nom.		3.3	5.0	9.0	12	15	18	24	±3.3	±5.0	±9.0	±12			±15	±24
MPV0560S	5.0	200 - 1,000	600	1		x												4.0	Module
MPV1060S	10	200 - 1,000	600	1		x	x						x					4.0	Module
MPV1560S	15	100 - 1,000	600	1				x	x				x					4.0	Module
MPV4060S	40	200 - 1,200	600	1				x	x				x					4.0	Module



# LED Drivers



Model	Constant Current Output	Input Voltage (VDC)		Efficiency (% Typ)	Output		Dimming		Remote On/Off	Case Type
		Nom	Range		Voltage (VDC)	Current (mA)	Digital	Analog		
LD24-xx-xxx	Yes	24	7 to 30	95	2 to 28	300 to 1,000	Yes	Yes	Yes	MiniDIP
LD24-xx-xxxW	Wired LD24-xx series models (with 4" 22 AWG wires instead of pins)									
LDB24-xxx	Yes	24	9 to 36	95	14 to 48	350 to 700	Yes	Yes	Yes	Module
LD24E-xx	Yes	24	5.5 to 36	95	2 to 32	300 to 700	Yes		Yes	MiniDIP
LDF24E-xx	Yes	24	5.5 to 48	96	3.3 to 36	300 to 700	Yes	Yes	Yes	SMT
<b>NEW</b> LDM12-xx	Yes	24	7 to 16	93	2 to 14	300 to 1,000	Yes	Yes	Yes	0.5 x 0.4"
<b>NEW</b> LDM24-xx	Yes	24	7 to 30	95	2 to 28	300 to 700	Yes	Yes	Yes	MiniDIP
LDF24E-xx	Yes	24	5.5 to 48	96	3.3 to 36	300 to 700	Yes	Yes	Yes	SMT
LD48-xx-xxxx	Yes	48	7.0 to 48	97	2.0 to 57	150 to 1,000	Yes	Yes	Yes	MiniDIP
LD48-xx-xxxxW	Wired LD48-xx series models (with 4" 22 AWG wires instead of pins)									

# Switching Regulators

Model	Output Current (A)	Input Voltage (VDC)		Output (VDC)	Line Regulation (%)	Load Regulation (%)	Efficiency (%)	Case Type
		Nom	Range					
LSR7805	0.5	12, 24	4.5 - 28	3.3, 5.0, 9.0, 12, 15	±0.2	±0.3	96	SMT
<b>NEW</b> MSRL7805	0.5	24	4.75 - 32	1.5, 1.8, 2.5, 3.3, 5.0, 6.5, 9.0, 12, 15	±0.2	±0.25	97	SMT
SR7805	0.5	12, 24	4.75 - 32	1.5, 1.8, 2.5, 3.3, 5.0, 6.5, 9.0, 12, 15	±0.5	±0.4	96	SIP
SRU7805	0.5	48	9.0 - 72	3.3, 5.0, 6.5, 9.0, 12, 15, 24	±0.4	±0.3	95	SIP
SR7810	1.0	12, 24	4.75 - 32	1.5, 1.8, 2.5, 3.3, 5.0, 6.5, 9.0, 12, 15	±0.2	±0.4	97	SIP
SRM7810	1.0	12	4.75 - 20	1.5, 1.8, 2.5, 3.3, 5.0	±0.5	±0.5	93	SIP
SR7815	1.5	12	4.75 - 18	1.5, 1.8, 2.5, 3.3, 5.0, 6.5	±0.5	±0.5	95	SIP
SR7820	2.0	12	4.75 - 18	1.5, 1.8, 2.5, 3.3, 5.0, 6.5	±0.5	±0.5	92	SIP
<b>NEW</b> MSR200	2.0	24	20 - 28	5, 12	±0.4	±0.5	95	1 x 1"

# IGBT Drivers

Model	Input (Supply)		Output 1					Output 2					I/O Iso (kVAC)	Case Type
	Voltage (VDC)		Voltage (VDC)			Current (mA)		Voltage (VDC)			Current (mA)			
	Nom	Range	Min	Nom	Max	Max	Min	Min	Nom	Max	Max	Min		
IG120-12	12	11.6 - 12.4	14.0	15.0	16.0	80	0.0	-7.0	-9.0	-10.0	40	0.0	3.0	SIP
IG120-12W	12	9.0 - 15.0	14.0	15.0	16.0	100	0.0	-7.0	-8.0	-9.0	80	0.0	3.0	SIP
IG120-15	15	14.5 - 15.5	14.0	15.0	16.0	80	0.0	-7.0	-8.7	-10.0	40	0.0	3.0	SIP
IG120-24	24	23.3 - 24.7	14.0	15.0	16.0	80	0.0	-7.0	-9.0	-10.0	40	0.0	3.0	SIP
IG136-15	15	14.5 - 15.5	16.5	17.0	18.0	80	0.0	-7.0	-8.7	-10.0	40	0.0	3.0	SIP
IGD841	Integrated Hybrid SIP Module For Driving IGBT Modules													
IGD962	Integrated Hybrid SIP Module For Driving IGBT Modules - Used With IG120/136													
IGD1205W	Integrated Hybrid SIP Module For Driving IGBT Modules - Built In DC/DC													

# Medical Products

MicroPower Direct now offers a wide range of AC/DC power supplies and DC/DC converters approved to EN 60601 medical standards. They are designed to provide the high power density, robust performance & safety certifications required for medical & patient care equipment. Some standard features include:



## Medical AC/DC's

Model	Power (W)	Input Voltage (VAC)		PFC	Output (VDC)			I/O Isolation (kVAC)	Case Type
		Range	Type		Single	Dual	Triple		
<b>NEW</b> MPM-24M	24.0	85 to 264	Universal	No	5, 9, 12, 15, 24	±12, ±15		3.0	Module
<b>NEW</b> MPM-40M	1.0	85 to 264	Universal	No	5, 12, 15, 24	±12, ±15		3.0	Module
<b>NEW</b> MPM-60M	1.0	85 to 305	Universal	No	5, 12, 15, 24, 48			3.0	Module
MPU-300M	300	90 to 264	Universal	Active	12, 15, 24, 48			3.0	U-Channel
MPU-400M	400	90 to 264	Universal	Active	12, 24, 48			4.0	U-Channel

## Medical DC/DC's

Series	Power (W)	Input Voltage (VDC)		No. of Outputs	Output Voltages											I/O Iso (kVAC)	Case Type	
		Nominal	Range		3.3	5.0	9.0	12	15	18	24	±3.3	±5.0	±9.0	±12			±15
MD100MHI	1.0	24, 48	±10%	1, 2	*	*	*	*	*	*	*	*	*	*	*	*	3.0	SIP
MG200MHI	2.0	24, 48	±10%	1, 2	*	*	*	*	*	*	*	*	*	*	*	*	4.0	MiniDIP
ML200MHI	2.0	12, 24, 48	±10%	1, 2	*	*	*	*	*	*	*	*	*	*	*	*	4.0	SMT
MA300MHI	3.0	24, 48	±10%	1, 2	*	*	*	*	*	*	*	*	*	*	*	*	3.0	DIP
MA600MHI	6.0	12, 24, 48	2:1	1, 2	*	*	*	*	*	*	*	*	*	*	*	*	4.0	DIP
MB1000MHI	10	12, 24, 48	2:1	1, 2	*	*	*	*	*	*	*	*	*	*	*	*	4.2	1 x 2"



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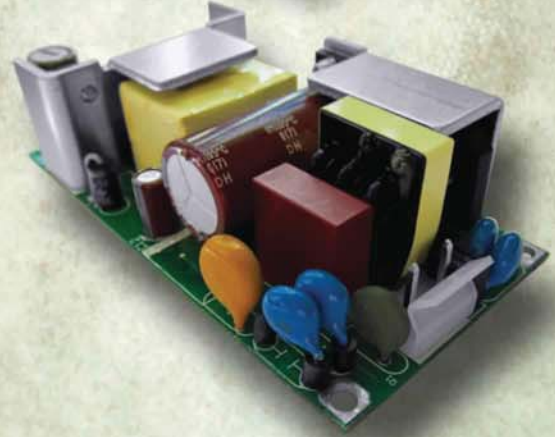
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