



MOTIEN TECHNOLOGY CO., LTD.

DC/DC CONVERTER DC/DC LED DRIVER



Description of ICONS

INPUT SECTION		OUTPUT SECTION		FEATURES	
	Built in EMC filter EN55032 Class A		Over Current Protection		Extended Operating Temperature
	Under Voltage Lock Out		Over Load Protection		Optional Heat Sink
	Remote ON/OFF Control		Over Temperature Protection		Higher Power Density
	Soft Start		Over Voltage Protection		High Isolation Voltage
	Buck Converter		Output Voltage Adjustable		Compact Size
	Boost Converter		Short Circuit Protection		Low Cost

Fixed Input 0.25W~3.0W

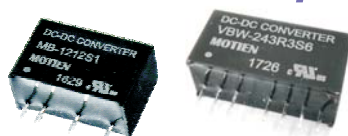


UL / EN / IEC 62368-1

Low cost & diverse models, these DC/DC Converters have been widely applied in many different application fields.

Series	O/P Power (W)	Electrical Specification			RoHS	CE	UL	Remark
		Form	O/P	I/O Iso (KVdc)				
V1	0.5~1.0	Unreg.	S/D	1.0~6.0	✓	✓	1W ✓	SIP 7 / DIP 14, featuring <i>individual two outputs</i>
VA	0.25~1.5	Unreg.	S/D	1.0/3.0	✓	✓		SIP 4 / DIP 8, featuring <i>individual two outputs</i>
T1	1.0	Unreg.	S/D	1.5/3.0	✓	✓		SIP 7, -40°C ~+105°C 
VL	1.0	Unreg.	S/D	6.0	✓	✓		SIP 7, I/O Working Voltage 250Vrms suitable for IGBT 
VL2	2.0	Unreg.	S/D	5.2	✓	✓		SIP 7, I/O Working Voltage 250Vrms suitable for IGBT 
V3	2.0	Unreg.	S/D	1.0~6.0	✓	✓		SIP 7 / DIP 14, featuring <i>individual two outputs</i>
VE	2.0	Unreg.	S	1.0/3.0	✓	✓		SIP 4 
M1	1.0/2.0/3.0	Semi-Reg.	S/D	1.0/3.0	✓	✓		SIP 7, <i>Semi-regulated O/P</i>
M4	1.0	Reg.	S	1.0/3.0	✓	✓		SIP 7 / DIP 14 <i>Regulated O/P</i> 

SIP Wide Input 1.0W~6.0W



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Occupies less space with good performance. Compact and precise design brings alternative solution in powering new design.

Series	O/P Power (W)	Electrical Specification			RoHS	CE	UL	Remark
		Form	O/P	I/O Iso (KVdc)				
MB	1.0	2:1/Reg.	S/D	1.5	✓	✓	✓	SIP 6  
VB	1.0~6.0	2:1/Reg.	S/D	1.0/1.5/3.0 1.6KVdc: 3W	✓	✓	✓	SIP 8   DIP16: 1W / 2W
VBW	2.0/3.0/6.0	4:1/Reg.	S/D	1.5/3.0	✓	✓	✓	SIP 8 / 9  
RBW	2.0 / 3.0	4:1/Reg.	S/D	1.6	✓	✓		SIP 8  

For details, please check : <http://www.motien.com.tw>

DIP24 1.5W~15.0W



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Ranged from 1.5W to 15W, international standard pin configuration.
To save cost and time, DIP 24 products are your best choice.

Series	O/P Power (W)	Electrical Specification			RoHS	CE	UL	Remark
		Form	O/P	I/O Iso (KVdc)				
MD	3.0 / 6.0	2:1/Reg.	S/D	1.5/3.0	✓	✓	✓	Plastic Case
MK	3.0 / 6.0	4:1/Reg.	S/D	1.5/3.0	✓	✓	✓	Plastic Case
VD	1.5~6.0	2:1/Reg.	S/D	1.5/3.5	✓	✓	✓	Optional Plastic Case
VK	1.5~6.0	4:1/Reg.	S/D	1.5/3.5	✓	✓	✓	Optional Plastic Case
VD	8.0 / 10.0	2:1/Reg.	S/D	1.5	✓	✓	✓	
RW	8.0	5:1/Reg.	S/D	3.0	✓	✓		
VU	10.0/12.0/15.0	2:1/Reg.	S/D	1.6	✓	✓	✓	
VV	10.0/12.0/15.0	4:1/Reg.	S/D	1.6	✓	✓	✓	

1"x1" 15.0W~30.0W



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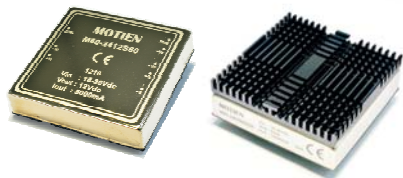
Compact & precise design, high efficiency with completed function.
Suitable for Telecom networks, Embedded system, Factory automation.

Series	O/P Power (W)	Electrical Specification			RoHS	CE	UL	Remark
		Form	O/P	I/O Iso (KVdc)				
VN	15.0 / 20.0	2:1/Reg.	S/D	1.6	✓	✓	✓	
VNW	15.0 / 20.0	4:1/Reg.	S/D	1.6	✓	✓	✓	
VN	30.0	2:1/Reg.	S/D	1.6	✓	✓	✓	
VNW	30.0	4:1/Reg.	S/D	1.6	✓	✓	✓	

2"x1.6" 25.0W~30.0W / 2"x2" 40.0W/60.0W



High Power Ratings, suitable for Automation, Ethernet / EtherCAT ,
Embedded system, LASER system...etc.



Series	O/P Power (W)	Electrical Specification			RoHS	CE	UL	Remark
		Form	O/P	I/O Iso (KVdc)				
VM	25.0 / 30.0	2:1/Reg.	S/D	1.5	✓	✓		
M40A	40.0	4:1/Reg.	S/D	1.6	✓	✓	✓	
M60	60.0	2:1/Reg.	S	1.6	✓	✓	✓	

2"x1" 7.5W~60W



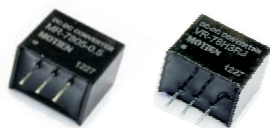
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Power ratings from 7.5W up to 60W.

International standard pin configuration with diverse specification
Suitable for Automation, Measurement, Embedded, Ethernet / EtherCAT,
Power managements.

Series	O/P Power (W)	Electrical Specification			RoHS	CE	UL	Remark
		Form	O/P	I/O Iso (KVdc)				
V7	7.5~15.0	2:1/Reg.	S/D	1.5	✓	✓	✓	
V7W	10.0/12.0/15.0	4:1/Reg.	S/D	1.5	✓	✓	✓	
V8	20.0	2:1/Reg.	S/D	1.6	✓	✓		
V9	20.0	4:1/Reg.	S/D	1.6	✓	✓		
VT	30.0 / 40.0	2:1/Reg.	S/D	1.6	✓	✓		
VTW	30.0	4:1/Reg.	S/D/T	1.6	✓	✓		
VT	50.0	2:1/Reg.	S	1.6	✓	✓	✓	
VTW	60.0	4:1/Reg.	S/D	1.6	✓	✓	✓	

POL Regulators



High Efficiency, Compact and easy to use. These Switching Regulators requires minimum space, external components but only Low Costs.

Series	O/P Current (A)	Electrical Specification		RoHS	CE	UL	Remark
		Vin	Vout				
VR	0.5 / 1.0	4.75~34.0	1.5 ~ 15.0	✓	✓		
MR	0.5 / 1.0	4.5~28.0	3.3 ~ 15.0	✓	✓		
VR-78H	0.5	9.0~72.0	3.3~15.0	✓	✓		High input voltage

DC/DC LED Drivers



Constant current with PWM / Analogue dimming and ON/OFF control.

Optional lead pins or wires version.

All series comply with En55015.

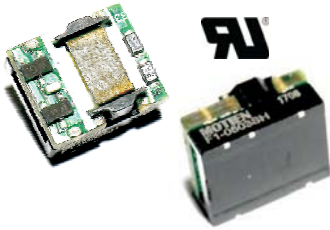
Suitable for general lighting, display of meters, dashboard, Traffic lights...etc.

Series	O/P Current (mA)	Electrical Specification		RoHS	CE	UL	Remark
		Vin	Vout				
MDL8 MDL20	150~350 500/600/700	7.0~30.0	2.0~28.0	✓	✓		DIP14
MDL14	300~1000	7.0~16.0	2.0~14.0	✓	✓		DIP8
MDL24	500~1000	7.0~30.0	2.0~28.0	✓	✓		DIP16
MDL48	150~1000	7.0~60.0	2.0~57.0	✓	✓		DIP24
MDL56	300~1000	9.0~60.0	2.0~56.0	✓	✓		DIP24 Digital Dimming
MULA	100~900	9.0~36.0	14.0~48.0	✓	✓		2"x1"

For details, please check : <http://www.motien.com.tw>

F1-1W Series

1W SMD8 Single / SMD10 Dual Output



High Isolation 4,200 Vdc.
 -40°C ~ +105°C Operating Temperature Range.
 Rated I/O Working Voltage 250Vrms.
 Low Coupling Capacitance.
 Qualified for Lead Free Reflow Soldering Process
 MSL Level 1-IPC/JEDEC J-STD-020D.1.
 Packing Tube / Tape & Reel Package Available.

VB-9W Series

9W SIP8, 2:1 Wide Input Range, Single / Dual Output



High Power Density in SIP8 Package.
 -40°C ~ +85°C Operating Temperature Range.
 Efficiency up to 90%.
 I/O Isolation Voltage 1,600Vdc.
 Remote On / Off Control.

VBW-9W Series

9W SIP8, 4:1 Wide Input Range, Single / Dual Output



High Power Density in SIP8 Package.
 -40°C ~ +85°C Operating Temperature Range.
 Efficiency up to 89%.
 I/O Isolation Voltage 1,600Vdc.
 Remote On / Off Control.

M7W-15W Series

15W, 1.6"x 1" 4:1 Input Range, Single / Dual Output



High Isolation 3,000Vdc.
 Extended Operating Temperature Range: -40°C ~ +100°C Max.
 Efficiency up to 90%.
 Remote On / Off Control.
 Over Load / Over Voltage Protection.
 Built in EMI Filter meets EN 55032 Class A without External Components.

M9-20W Series

20W, 1.6"x 1" 4:1 Input Range, Single / Dual Output



High Isolation 3,000Vdc.
 Extended Operating Temperature Range: -40°C ~ +100°C Max.
 Efficiency up to 91%.
 Remote On / Off Control.
 Over Load / Over Voltage Protection.
 Built in EMI Filter meets EN 55032 Class A without External Components.

MOTIEN TECHNOLOGY CO., LTD. was founded in 1998,
the manufacturer who is specialized in DC/DC converters and
DC / DC LED drivers with well reputation in this field for over ten years.

Company Mission

Rapid & punctual delivery
Superior & Stable Quality
Surpass continuously

Quality Policy

Continuous Growth
Punctual Delivery
Stable Quality
Customers' Satisfaction

Our Products

- Power rating from 0.25W up to 60W with different packages.
- Isolated DC /DC Converters with regulated and unregulated outputs.
- Non-isolated DC/DC converters.
- Quality Assurance: ISO 9001, ISO 14001.
- Products are Reach Compliant, RoHS Compliant.
- Hazardous Substance Process Management (IECQ QC 080000).
- International Certifications: UL, CE, CB, TUV.
- 3-year warranty.



MOTIEN TECHNOLOGY CO., LTD.

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