

ULTRA-HIGH ISOLATION POWER SOLUTION



MOTIEN TECHNOLOGY is proud to present the new 10W + 20W + 30W ultra-high isolated DC /DC converter

– **NC10HW& ND-20HW& NJ30HW Series**



NC10HW-10W

24 Pin DIL



ND20HW-20W

1.6"x1" Package



NJ30HW-30W

2"x1" Package

Awesome Features

Ultra-high I/O Isolation

5000 VAC Isolation with Reinforced Isolation
Rated for 250Vrms Working Voltage

Wide 4:1 Input Voltage Range

NC10HW: 4.5 ~18 / 9~36 / 18~75Vdc
ND20HW / NJ30HW: 9~36 / 18~75Vdc

Extended Operating Temp

Offer from -40 °C to +100 °C (Derating)

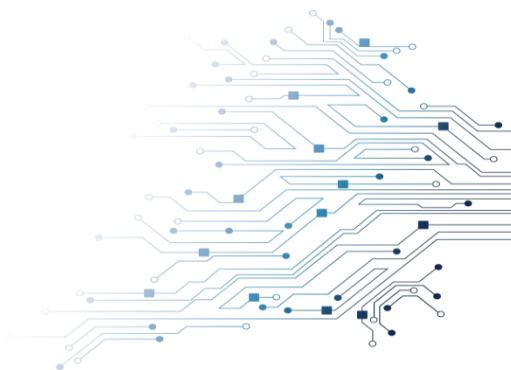


MOTIEN TECHNOLOGY CO., LTD.

[Http://www.motien.com.tw](http://www.motien.com.tw) [Http://www.motien-power.asia](http://www.motien-power.asia)



NC10HW-10W Series



Feature:

- ✓ 10W Single & Dual output / DIP24
- ✓ Wide 4:1 Input Range
- ✓ Isolation Voltage up to 5000VAC
- ✓ Reinforced Insulation for 250Vrms Working Voltage
- ✓ Efficiency is up to 89%
- ✓ Continuous Short Circuit Protection
- ✓ Operating temperature: -40°C ~ +100 °C
- ✓ UL/cUL/IEC/EN 62368-1 Safety Approval
- ✓ Under-voltage, Overload/Voltage Protection

Comparison with MOTIEN existing products :

	Motien - NC10HW	Motien - VU-10W	Motien - VV-10W
Package	DIP24		
Pinout compatibility	Incompatible		
Output Power	10 W	7.5~10 W	8.91~10 W
Efficiency	84.5 %, min.	81 %, min.	87 %, min.
Short Circuit Protection	Yes	Yes	Yes
Max. Capacitive Load	3300 μ F	2200 μ F	1330 μ F
Isolation Voltage (input / output)	5000 VAC	1500 VDC	1600 VDC
Isolation Capacitance	17 pF, typ.	1000 pF, typ.	1500 pF, typ.
Leakage Current	2 μ A, typ.	-	-
Working Voltage	250 Vrms	-	-
Clearance/Creepage	8 mm, min.	-	-
Max. Case Temperature	105 °C	100 °C	105 °C
Operating Temperature (For Full Load)	-40 ~ 82 °C	-40 ~ 78 °C	-40 ~ 79 °C
Under Voltage Lockout	Yes	No	No
Remote ON/OFF	Yes	No	Yes
Trim	Yes	No	No
Over Current Protection	Yes	Yes	Yes
Over Voltage Protection	Yes	No	Yes
Safety Approval	IEC / EN / UL 62368-1 (Reinforced Insulation)	IEC / EN / UL 62368-1 (Functional Insulation)	IEC / EN / UL 62368-1 (Functional Insulation)



MOTIEN TECHNOLOGY CO., LTD.

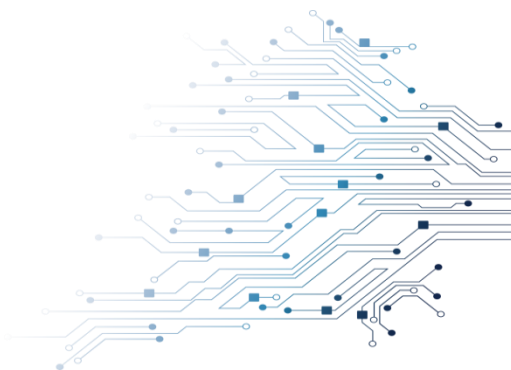
[Http://www.motien.com.tw](http://www.motien.com.tw) [Http://www.motien-power.asia](http://www.motien-power.asia)



ND20HW-20W Series



CB CE UK CA



Feature:

- ✓ 20W Single & Dual output / 1.6"x1" Package
- ✓ Wide 4:1 Input Range
- ✓ Isolation Voltage up to 5000VAC
- ✓ Reinforced Insulation for 250Vrms Working Voltage
- ✓ Efficiency is up to 90%
- ✓ Operating temperature: -40°C ~ +100 °C
- ✓ UL/cUL/IEC/EN 62368-1 Safety Approval
- ✓ Under-voltage, Overload/Voltage/Temperature and Short Circuit Protection



Comparison with MOTIEN existing products :

	Motien - ND20HW	Motien - M9-20W
Package	1.6" x 1"	
Pinout compatibility	Incompatible	
Output Power	20 W	20 W
Efficiency	86 %, min.	85.5 %, min.
Short Circuit Protection	Yes	Yes
Max. Capacitive Load	5000 μ F	10000 μ F
Isolation Voltage (input / output)	5000 VAC	3000 VDC
Isolation Capacitance	17pF, typ.	2000pF, typ.
Leakage Current	2 μ A, typ.	-
Working Voltage	250 Vrms	-
Clearance/Creepage	8 mm, min.	-
Max. Case Temperature	105°C	105°C
Operating Temperature (For Full Load)	-40 ~ 70°C	-40 ~ 66°C
Under Voltage Lockout	Yes	Yes
Remote ON/OFF	Yes	Yes
Trim	Yes	Yes
Over Current Protection	Yes	Yes
Over Voltage Protection	Yes	Yes
Safety Approval	IEC / EN /UL 62368-1 (Reinforced Insulation)	IEC / EN / UL 62368-1 (Functional Insulation)

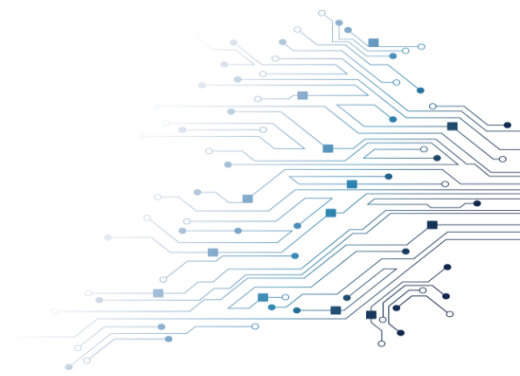


MOTIEN TECHNOLOGY CO., LTD.

[Http://www.motien.com.tw](http://www.motien.com.tw) [Http://www.motien-power.asia](http://www.motien-power.asia)



NJ30HW-30W Series



Feature:

- ✓ 30W Single & Dual output / 2"x1" Package
- ✓ Wide 4:1 Input Range
- ✓ Isolation Voltage up to 5000VAC
- ✓ Reinforced Insulation for 250Vrms Working Voltage
- ✓ Efficiency is up to 89%
- ✓ Operating temperature: -40°C ~ +100 °C
- ✓ UL/cUL/IEC/EN 62368-1 Safety Approval
- ✓ Under-voltage, Overload/Voltage/Temperature and Short Circuit Protection



Comparison with MOTIEN existing products :

	Motien- NJ30HW	Motien -VTW-30W
Package	2" X 1"	
Pinout compatibility	compatible	
Output Power	30 W	30 W
Efficiency	84 ~ 89 %, typ.	86 ~91 %
Short Circuit Protection	Yes	Yes
Max. Capacitive Load	7200 μ F	20000 μ F
Isolation Voltage (input / output)	5000 VAC	1600 VDC
Isolation Capacitance	20pF, typ.	1500pF, typ.
Leakage Current	2 μ A, typ.	--
Working Voltage	250 Vrms	--
Clearance/Creepage	8 mm, min.	--
Max. Case Temperature	105°C	105°C
Operating Temperature (For Full Load)	-40 ~100°C	-40 ~ 75°C
Under Voltage Lockout	Yes	Yes
Remote ON/OFF	Yes	Yes
Trim	Yes	Yes
Over Current Protection	Yes	Yes
Over Voltage Protection	Yes	Yes
Safety Approval	IEC / EN / UL 62368-1 (Reinforced Insulation)	IEC / EN / UL 62368-1 (Functional Insulation)



MOTIEN TECHNOLOGY CO., LTD.

[Http://www.motien.com.tw](http://www.motien.com.tw) [Http://www.motien-power.asia](http://www.motien-power.asia)

