

# ROTOSOL INVERT

SOLAR  
PHOTOVOLTAIC  
STRING INVERTER



Single Phase  
(1-3.6kW)



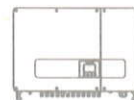
Single Phase  
(3-8kW)



Three Phase  
(5-15kW)



Three Phase  
(17-40kW)



Three Phase  
(50-60kW)

# ABOUT ROTOMAG



AC Motor & Solar Pump Manufacturing Unit



DC Motor Manufacturing Unit

The Rotomag Group is globally recognized for the manufacture of high performance motors, gearboxes, solar pumps, controllers & inverters. Rotomag, the flagship company manufactures DC Motors and gearboxes. Rotosol, a division of Rotomag manufactures Solar Pumps, Controllers and Inverters.

Rotomotive Powerdrives in collaboration with Motive, Italy manufactures AC motors and Gearboxes. Rotodrive, a division of Rotomotive manufactures drives for EVs.

Magtor in collaboration with Magnetic, Italy manufactures Servomotors and Drives.



Controller & Inverter Manufacturing Unit

## MANUFACTURING

Our world class manufacturing facilities are spread among 3 units in an area of over 1.6 lakh sq. ft. with a dedicated plant for controller and inverter manufacturing.

State of the art R&D and QA ensures that every new product that is developed exceeds international standards of performance and quality.



ISO 9001:2015

ISO 14001:2015

OHSAS 18001:2007



VDE 0126  
VDE 4105



PROPOSED DEALER & SUPPORT NETWORK

## RESIDENTIAL SYSTEMS 1kW to 8kW - 1 $\Phi$

Rotosol Invert offers a complete range of single phase inverters for residential roof-top systems.



## SMALL COMMERCIAL SYSTEMS 5kW to 10kW - 3 $\Phi$

Rotosol Invert offers modular design three phase inverters for small commercial systems. This design improves the generation efficiency and system stability thereby reducing cost of installation and maintenance.



## COMMERCIAL SYSTEMS & POWER PLANTS 15kW to 60kW - 3 $\Phi$

Rotosol Invert offers light weight and modular design inverters for Large Commercial Systems and Power Plants. This design offers greater efficiency, system stability and flexibility.



## FEATURES

### External Inductor

Temperature inside of the box is effectively reduced by isolating the main heat source, which significantly improves the reliability and life of inverter.



### Aluminium Enclosure Design

Light and compact with self cooling mechanism and anti-corrosion treated surfaces.

### Soft Keys

High reliability and responsive

### Wired Ethernet/ WI-FI(Optional)/GPRS Remote Monitoring (Optional)

Remote operation status on Mobile Devices.



Two MPPT design ((RIT3K ~ RIT8K)



Quick and easy installation



MPPT efficiency > 99.9%



Multiple automatic intelligent protections



High-quality power output and low THDI. Generally THDI is lower than 3% and near 1% when power output is more than 50%



No fan design. Noise is lower than 40dB under full-load operation



Active and reactive power compensation, power factor adjustment results in improved efficiency



Intelligent Temperature Control System



Internal LCL choke reduces impacts on the inverter and the system from frequent switching of power supply



IP68 grade fan



DC and AC lightning protection function (Type II)



Support 1.2 times power input overload and 1.1 times output capacity

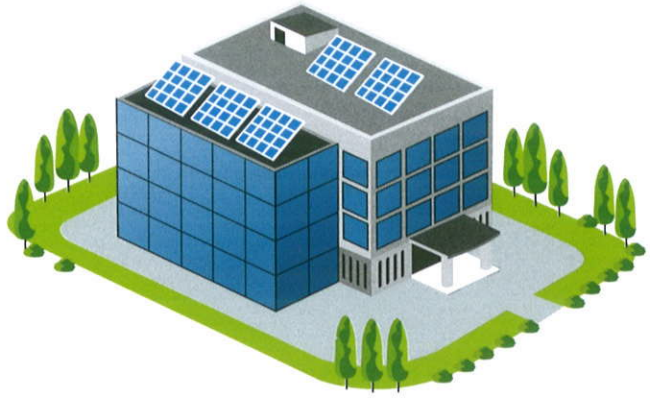


Compact and light weight aluminium design



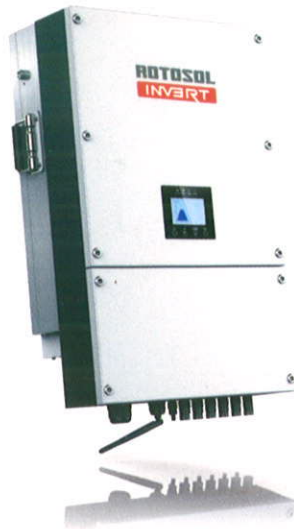
## RESIDENTIAL 1-8kW (Single Phase)

Electrical Specifications	RIS1K	RIS2K	RIS3K	RIS4K	RIS5K	RIS6K	RIS8K
<b>Input (DC)</b>							
Max DC Power (W)	1100	2200	3300	4400	5500	6600	8800
Max DC Voltage (V)	450	500	550	550	550	550	580
Rated / Recommended Voltage (V)	360	360	360	360	360	380	450
MPPT DC Voltage Range (V)	50-400	120-400	120-450	120-450	120-450	120-450	120-480
Start up DC Voltage (V)	60	150	150	150	150	150	150
Max DC Current (A)	10	12	12*2	16*2	18*2	18*2	18*2
Number of MPPT Tracker	1	1	2	2	2	2	2
Number of DC Connections (set)	1	1	2	2	2	2	2+1
<b>Output (A)</b>							
Max AC Power (W)	1050	2100	3100	4100	5100	6100	8000
Nominal AC Power (W)	1000	2000	3000	4000	5000	6000	8000
Max AC Current (A)	6	12	15	20	23	28	33
Nominal AC Current (A)	6	10	13	18	22	26	32
Nominal AC Voltage (V)	220/230						
Nominal AC Frequency (Hz)	50/60						
Power Factor	-0.95 ~ +0.95						
Output current THD	<3%						
<b>Power consumption</b>							
Power consumption at Night (W)	<0.2	<1	<1	<1	<1	<1	<1
Power consumption at Standby (W)	6						
<b>Power Efficiency</b>							
Max Efficiency	96.50%	97.70%	98.03%	98.03%	98.10%	98.10%	98.20%
Euro Efficiency	96.00%	96.60%	97.60%	97.60%	97.60%	97.60%	97.80%
MPPT Efficiency	>99.90%	>99.90%	>99.90%	>99.90%	>99.90%	>99.90%	>99.90%
<b>Safety and protection</b>							
Safety Standard	EN/IEC 62109-1/-2						
EMC Standard	EN/IEC 61000-6, EN/IEC 61000-3						
Anti-islanding Protection	Internal						
<b>General information</b>							
Dimensions (W*H*D) (mm)	320*345*170		460*345*170			560*345*170	
Enclosure	IP65						
RCD	Internal						
Weight (kg)	9		17			18.5	
Ambient Temperature Range	-25°C ~ +60°C						
Relative humidity	0%~100%						
Topology	Transformerless						
Communication Interface	RS485 / WIFI / Wired Ethernet / GPRS (Optional)						
Cooling Concept	Convection						
Noise Emission (dB)	< 28			< 40			
Maximum Altitude (above sea level) (m)	Up to 2000m without derating						



## SMALL COMMERCIAL SYSTEMS 5 -10kW (Three Phase)

Electrical Specifications	RIT5K	RIT6K	RIT8K	RIT10K
<b>Input (DC)</b>				
Max DC Power (W)	5500	6600	8800	11000
Max DC Voltage (V)	1000	1000	1000	1000
Rated / Recommended Voltage (V)	620	620	620	620
MPPT DC Voltage Range (V)	200-800	200-800	250-800	300-800
Start up DC Voltage (V)	250	250	320	320
Max DC Current (A)	11*2	11*2	11*2	11*2
Number of MPPT Tracker	2	2	2	2
Number of DC Connections (set)	2	2	2	2
<b>Output (AC)</b>				
Max AC Power (W)	5350	6450	8600	10000
Nominal AC Power (W)	5000	6000	8000	10000
Max AC Current (A)	8.5	10.5	13.5	17
Nominal AC Current (A)	7	8.5	11	14
Nominal AC Voltage (V)	3P+N+PE/3P+PE, 230/400			
Nominal AC Frequency (Hz)	50/60			
Power Factor	-0.95 ~ +0.95			
Output current THD	<3%			
<b>Power consumption</b>				
Power consumption at Night (W)	<1			
Power consumption at Standby (W)	10			
<b>Power Efficiency</b>				
Max Efficiency	98.10%	98.10%	98.20%	98.20%
Euro Efficiency	97.55%	97.60%	97.65%	97.70%
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%
<b>Safety and protection</b>				
Safety Standard	EN/IEC 62109-1/-2			
EMC Standard	EN/IEC 61000-6, EN61000-3			
Anti-islanding Protection	Internal			
<b>General information</b>				
Dimensions (W*H*D) (mm)	680*345*170			
Enclosure	IP65			
RCD	Internal			
Weight (kg)	21.5			
Ambient Temperature Range	-25°C ~ +60°C			
Relative humidity	0%~100%			
Topology	Transformerless			
Communication Interface	RS485 / WIFI / Wired Ethernet / GPRS (Optional)			
Cooling Concept	Convection			
Noise Emission (dB)	<40			
Maximum Altitude (above sea level) (m)	Up to 2000m without derating			



## COMMERCIAL SYSTEMS & POWER PLANTS 15-60kW (Three Phase)

Electrical Specifications	RIT15K	RIT20K	RIT30K	RIT40K	RIT50K	RIT60K
<b>Input (DC)</b>						
Max DC Power (W)	16500	22000	33000	44000	60000	72000
Max DC Voltage (V)	1000	1000	1000	1000	1000	1000
Rated / Recommended Voltage (V)	620	620	620	620	620	620
MPPT DC Voltage Range (V)	300-800	300-800	300-800	300-850	300~950	300~950
Start up DC Voltage (V)	320	320	320	320	320	320
Max DC Current (A)	19*2	22*2	33*2	40*2	36/36/36	40/40/40
Number of MPPT Tracker	2	2	2	2	3	3
Number of DC Connections (set)	4	4	6	8	12	12
<b>Output (A)</b>						
Max AC Power (W)	16100	21450	30200	40500	55000	66000
Nominal AC Power (W)	15000	20000	30000	40000	50000	60000
Max AC Current (A)	27	32	45	61	80	95
Nominal AC Current (A)	22	29	43	58	72.5	87
Nominal AC Voltage (V)	3P+N+PE/3P+PE, 230/400					
Nominal AC Frequency (Hz)	50/60					
Power Factor	0.99 (-0.8 ~ +0.8)					
Output current THD	<3%					
<b>Power consumption</b>						
Power consumption at Night (W)	<1					
Power consumption at Standby (W)	<15					
<b>Power Efficiency</b>						
Max Efficiency	98.50%	98.50%	98.50%	98.65%	98.80%	99.00%
Euro Efficiency	98.00%	98.10%	98.10%	98.25%	98.45%	98.50%
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%
<b>Safety and protection</b>						
Safety Standard	EN/IEC 62109-1/-2					
EMC Standard	EN/IEC 61000-6, EN61000-3					
Anti-islanding Protection	Internal					
<b>General information</b>						
Dimensions (W*H*D) (mm)	730*465*222		750*465*222		630*850*306	
Enclosure	IP65					
RCD	Internal					
Weight (kg)	40	42	46	66	68	
Ambient Temperature Range	-25°C ~ +60°C					
Relative humidity	0%~100%					
Topology	Transformerless					
Communication Interface	WIFI / Wired Ethernet / GPRS (Optional)					
Cooling Concept	Intelligent fan cooling					
Noise Emission (dB)	<40		<51		<55	
Maximum Altitude (above sea level) (m)	Up to 3000m without derating					

# ROTOSOL INVERT

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All Inverters manufactured by  
ROTOMAG are branded as ROTOSOL INVERT

Authorised Dealer

