

O-SOLAR  **COM**



Orange Solar Power
Lelyweg 12
4612 PS Bergen op Zoom
The Netherlands
T. +31 (0)164 76 38 26
info@o-solar.com



ORANGE SOLAR[®]
SOLAR POWER SOLUTIONS

ORANGE SOLAR POWER

SUNRAYS SERIES THREE-PHASE INVERTER

PV GRID TIED INVERTER
6000MTL/7000MTL
8000MTL/10000MTL
12000MTL/15000MTL
17000MTL/20000MTL

HIGH YIELD

FLEXIBLE AND ECONOMICAL

LOW MAINTENANCE COSTS

INTELLIGENT GRID MANAGEMENT



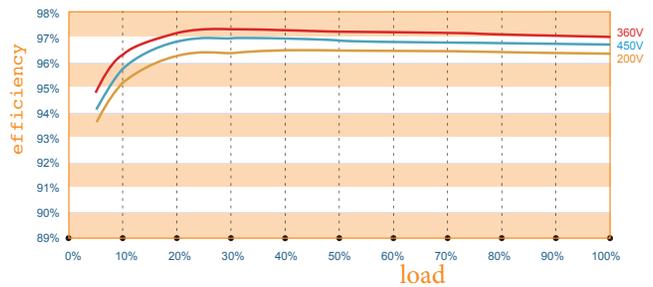
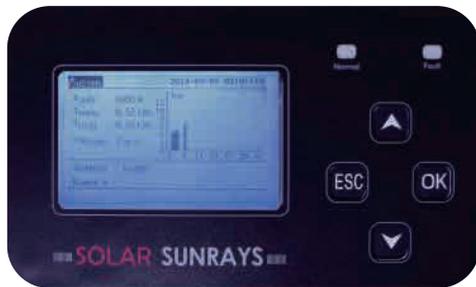
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SOLAR POWER SOLUTIONS

SUNRAYS SERIES THREE-PHASE

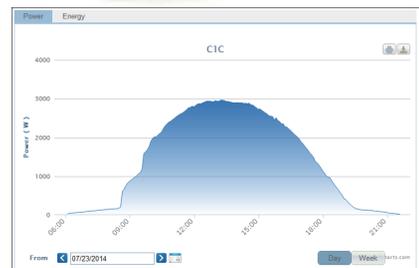
IDEAAL VOOR GROTE PROJECTEN

IDEAL FOR LARGE PROJECTS

- * Three-phase inverter
- * Wide range of DC input and MPPT voltage
- * Easy maintenance
- * High performance, low cost



SOLARMAN ONLINE MONITORING SOFTWARE EASY MONITORING, WHEREVER YOU ARE!



- Internet-based remote management system
- Real-time monitoring and data recording
- Communicative display
- Customized service
- Periodic status reports on system operations

HIGH CONVERSION EFFICIENCY

Max. efficiency 98.0%
Real-time precise MPPT algorithm for max. harvest
Wide operating voltage range input, from 200V to 1000V

EASY MAINTENANCE

Detachable cover for easy installation
Rust-resistant aluminum covers
Flexible and mature monitoring solution
Multi-functional relay can be configured to display inverter information

INTELLIGENT GRID MANAGEMENT

Integrated Wi-Fi for global monitoring
Monitoring on computer and mobile devices

WIDE SELECTION

LVRT support
Adjustable reactive power
Self power reduction at over frequency
Remote active/reactive power limit control



FACTS AND FIGURES THE EASY WAY

The table below lists the technical specifications of the product you are considering to purchase. Your contractor, of course, also has access to this information and more. Nevertheless, should you have any questions concerning this data please do not hesitate to contact our service center by telephone at +31 (0)164 76 38 26, via e-mail: info@o-solar.com, or visit our website: www.o-solar.com.

FACTS AND FIGURES

Type	Sunrays 6000MTL	Sunrays 7000MTL	Sunrays 8000MTL	Sunrays 10000MTL
Input Data (DC)				
Max. DC input power (W)	6500	7500	8500	10500
Max. DC voltage (V)	1000	1000	1000	1000
Operating voltage range (V)	200-1000	200-1000	200-1000	250-1000
MPPT voltage range (V)	215-800	250-800	280-800	350-1000
Turn on/turn off DC voltage (V)	200/150	200/150	200/150	200/150
Max. DC current (A)	15/15	15/15	15/15	15/15
No. of MPPTs	2	2	2	2
Strings per MPPT	1	1	1	1
DC switch	Integrated	Integrated	Integrated	Integrated
Output Data (AC)				
Grid connection	Three-phase	Three-phase	Three-phase	Three-phase
Rated AC power (W)	6000	7000	8000	10000
Max. AC power (W)	6000	7000	8000	10000
Max. AC current (A)	10	11.5	13	15.5
Rated AC voltage/range (V)	3/N/PE, 230/400	3/N/PE, 230/400	3/N/PE, 230/400	3/N/PE, 230/400
Rated AC frequency/range (Hz)	50/47~53	50/47~53	50/47~53	50/47~53
Power factor (adjustable)	0.9 leading ...0.9 lagging	0.9 leading ...0.9 lagging	0.9 leading ...0.9 lagging	0.9 leading ...0.9 lagging
THD	<3%	<3%	<3%	<3%
Efficiency				
Max. efficiency	97.8%	98.0%	98.0%	98.0%
Euro efficiency	97.4%	97.4%	97.4%	97.5%
MPPT efficiency	99.9%	99.9%	99.9%	99.9%
Safety equipment				
DC insulation monitoring	Integrated	Integrated	Integrated	Integrated
Earth fault protection	Integrated	Integrated	Integrated	Integrated
Mains monitoring	Integrated	Integrated	Integrated	Integrated
Earth fault current monitoring	Integrated	Integrated	Integrated	Integrated
Islanding protection	AFD	AFD	AFD	AFD
General data				
Weight (kg)	28	29	30	32
Dimensions [W x H x D] (mm)	620 x 525 x 160			
Operating temperature range (°C)	-20~+60			
IP protection type	IP 65 according to IEC 60529			
Isolation type	Transformerless			
Cooling	Convection			
Noise level	< 35 dBA			
LCD display	4.0* LCD			
Communication	RS232/Wi-Fi (integrated)			
Standard warranty	5 years			
Certificates	AS4777, G83, G59, EN61000-3-2, EN61000-6-1/2/3/4, IEC-62109-1, IEC-62109-2, VDE0126-1-1, EN50438			

FACTS AND FIGURES THE EASY WAY

The table below lists the technical specifications of the product you are considering to purchase. Your contractor, of course, also has access to this information and more. Nevertheless, should you have any questions concerning this data please do not hesitate to contact our service center by telephone at +31 (0)164 76 38 26, via e-mail: info@o-solar.com, or visit our website: www.o-solar.com.

FACTS AND FIGURES

Type	Sunrays 12000MTL	Sunrays 15000MTL	Sunrays 17000MTL	Sunrays 20000MTL
Input Data (DC)				
Max. DC input power (W)	12000	15340	17410	20500
Max. DC voltage (V)	1000	1000	1000	1000
Operating voltage range (V)	250-1000	200-1000	200-1000	250-1000
MPPT voltage range (V)	400-800	380-800	430-800	500-800
Turn on/turn off DC voltage (V)	200/150	200/160	200/160	200/160
Max. DC current (A)	15/15	20/20	20/20	20/20
No. of MPPTs	2	2	2	2
Strings per MPPT	1	1	1	1
DC switch	Integrated	Integrated	Integrated	Integrated
Output Data (AC)				
Grid connection	Three-phase	Three-phase	Three-phase	Three-phase
Rated AC power (W)	11000	15000	17000	20000
Max. AC power (W)	11000	15000	17000	20000
Max. AC current (A)	16	24	25	30
Rated AC voltage/range (V)	3/N/PE, 230/400	3/N/PE, 230/400	3/N/PE, 230/400	3/N/PE, 230/400
Rated AC frequency/range (Hz)	50/47~53	50/47~53	50/47~53	50/47~53
Power factor (adjustable)	0.9 leading ...0.9 lagging	0.9 leading ...0.9 lagging	0.9 leading ...0.9 lagging	0.9 leading ...0.9 lagging
THD	<3%	<3%	<3%	<3%
Efficiency				
Max. efficiency	98.0%	98.0%	98.0%	98.0%
Euro efficiency	97.5%	97.5%	97.5%	97.5%
MPPT efficiency	99.9%	99.9%	99.9%	99.9%
Safety equipment				
DC insulation monitoring	Integrated	Integrated	Integrated	Integrated
Earth fault protection	Integrated	Integrated	Integrated	Integrated
Mains monitoring	Integrated	Integrated	Integrated	Integrated
Earth fault current monitoring	Integrated	Integrated	Integrated	Integrated
Islanding protection	AFD	AFD	AFD	AFD
General data				
Weight (kg)	45	45	48	48
Dimensions [W x H x D] (mm)	620 x 525 x 160			
Operating temperature range (°C)	-20~+60			
IP protection type	IP 65 according to IEC 60529			
Isolation type	Transformerless			
Cooling	Convection			
Noise level	< 35 dBA			
LCD display	4.0* LCD			
Communication	RS232/Wi-Fi (integrated)			
Standard warranty	5 years			
Certificates	AS4777, G83, G59, EN61000-3-2, EN61000-6-1/2/3/4, IEC-62109-1, IEC-62109-2, VDE0126-1-1, EN50438			