

4. Technical data

Model	SMP300	SMP600
Input data(DC)		
Recommended input power (W)	200~320	2 * 200~320
MPPT voltage range (V)	24~45	24~45
Operating voltage range (V)	18~50	18~50
Maximum input voltage (V)	50	50
Maximum input current (A)	9.5	9.5
Inverter back feed current (A)	0	0
Max. Input Short Circuit Current (A)	15	15
Output Data (AC)		
Max. output power (W)	270	550
Rated output power (W)	250	500
Rated output current (A)	1.09	2.17
Max. output current (A)	1.19	2.39
Maximum output fault current [A]	1.5	3
Maximum output protection current [A]	20	20
Nominal output voltage (V)	220/230/240	220/230/240
Nominal frequency (Hz)	50/60	50/60
Power factor	>0.99	>0.99
Output current harmonic distortion	<3%	<3%
Maximum Units per 20A Branch	16	8
Efficiency		
Peak inverter efficiency	96.70%	96.70%
CEC weighted efficiency	96.50%	96.50%
Nominal MPPT efficiency	99.80%	99.80%
Night time power consumption (mW)	<120	<120
Mechanical Data		
Dimensions (WxHxD mm)	168x162x34.5	218x174x34.5
Weight [kg]	1.89	2.35
Type of Enclosure	IP67	
Cooling	Natural Convection	
Environmental Data		
Operating Ambient Temperature Range	-40°C to 65°C	
Operating Internal Temperature Range	-40°C to 85°C	
Relative Humidity	0-100 % condensing	
Environmental Category Rating	Outdoor, suitable to wet locations	
Isolation Type	Isolation Transformer	
Insulation Level	Reinforced insulation	

Max. Operating Altitude without Derating [m]	2000
Pollution Degree	PD3
Overvoltage Category	OVC II for PV input circuit,
	OVC III for mains circuit
Protective class	I

5. Prepare for installing

5.1. Transport and inspect

Omnik packages and protects individual components using suitable means to make the transport and subsequent handling easier. Transportation of the equipment, especially by road, must be carried out by suitable ways for protecting the components (in particular, the electronic components) from violent, shocks, humidity, vibration, etc. Please dispose the packaging elements in appropriate ways to avoid unforeseen injury.

It is the customer's responsibility to examine the condition of the components transported. Once receiving the Micro-inverter, it is necessary to check the container for any external damage and verify receipt of all items. Call the delivering carrier immediately if damage or shortage is detected. If inspection reveals damage to the inverter, contact the supplier, or authorized distributor for are pair/return determination and instructions regarding the process.

5.2. Check installation environment

Installation of the equipment is carried out based on the system design and the place in which the equipment is installed.

- The installation must be carried out with the equipment disconnected from the grid (power disconnect switch open) and with the photovoltaic modules shaded or isolated.
- To avoid unwanted power derating due to an increase in the internal temperature of the inverter, do not expose it to direct sunlight.
- To avoid overheating, always make sure the flow of air around the inverter is not blocked.
- Do not install in places where gasses or flammable substances may be present.
- Avoid electromagnetic interference that can compromise the correct operation of electronic equipment.
- To ensure the safety of personnel and equipment needed to mount the PV array is connected and grounded with another conductor casing.

5.3. Installation position

When choosing the position of installation, comply with the following conditions:
Install only on structures specifically conceived for photovoltaic modules (supplied by