



Micro Inverter

Sunny 300
Sunny 350
Sunny 400

Description

With the output power up to 400VA, AVT New Energy micro inverter Sunny series 1P rank the highest in the field of 1-in-1 micro inverters. Each micro inverter is able to connect to 1 panel, with independent MPPT which can maximize the power efficiency up to 99.8%.

The integrated 2.4G wireless solution provides easier communication with the cloud to monitor the system working status and offer remote firmware upgrade.

Features

- ☉ Maximum power output up to 400 VA in a single unit
- ☉ Compliance with: EN 50549-1: 2019, EN 50549-2: 2019, EN61000-6-1:2007, EN61000-6-3:2007+A1:2011+AC2012, IEC/EN 62109-1/2010, IEC/EN 62109-2/2011
- ☉ High reliability: NEMA 3R (IP65) enclosure; 6000V surge protection
- ☉ Independent MPPT and monitoring ensure high power transfer efficiency and easier maintenance
- ☉ 4-in-1 design brings faster installation and reduces system cost
- ☉ 2.4G wireless solution provides easier communication for system monitoring and setting

Technical Specification

Model	Sunny 300	Sunny 350	Sunny 400
DC INPUT			
Maximum input power (W)	375	435	500
Maximum input voltage (V)		60	
MPPT input range (V)		30 to 60	
Inverter starting voltage (V)		22	
Maximum input current (A)	13.7	16	18
Maximum input short circuit current (A)	15	18	20
Number of MPPT		1	
AC OUTPUT			
Maximum output power (VA)	300	250	400
Rated output current (A)	@120V 2.5A	@120V 2.9A	@120V 3.3A
	@230V 1.3A	@230V 1.5A	@230V 1.7A
Nominal Output Voltage Range (V)	85-160 for 120V AC (Application area: such as Japan, North America, etc.) or 180-265 for 230V AC (Application area: such as Europe)		
Nominal Frequency Range (Hz)	48 to 51 for grid with 50Hz		
	58 to 61 for grid with 60Hz		
Power Factor	> 0.99 default 0.95 leading...0.95 lagging		
Total harmonic distortion (THD)	<3%		
Maximum number of connections per branch	@120V 15PCs	@120V 15PCs	@120V 15PCs
	@230V 25Pcs	@230V 25Pcs	@230V 25Pcs
Efficiency			
CEC peak efficiency	92.50%		
Nominal MPPT efficiency	99.80%		
Night power consumption (mW)	0		
Mechanical Data			
Ambient temperature range (°C)	-40 to +60		
Dimensions (L × W × H mm)	165×176×38		
Weight (kg)	0.9		
Waterproof level	Outdoor NEMA 3R (IP65)		
Cooling	Natural convection (no fans)		
Features			
Communication connectivity	Wifi 2.4G		
Power delivery mode	Reverse transmission, load priority		
Monitoring	Cloud Intelligence		
Compliance	EN 50549-1: 2019, EN 50549-2: 2019, EN61000-6-1:2007, EN61000-6-3:2007+A1:2011+AC2012, IEC/EN 62109-1/2010, IEC/EN 62109-2/2011		
Warranty	5 years		