

AlpSolarr

BETTER ENERGY FOR A BETTER WORLD

ROSA Series T2

Three Phase
Hybrid Inverter

5
-
12kW

LFP/VRLA

2 MPPTs



Fanless Silent Design

Whisper-quiet operation with fanless design for a noise-free environment

110% Unbalanced Load Support

Supports 110% unbalanced loads in complex electrical environments

150% Overload Tolerance

Supports 1.5x the transient overload for greater reliability

IP66 Rating Design

Dustproof and waterproof design ensures long equipment life

Flexible Paralleling

Easily expandable with paralleling capabilities for diverse scenarios

Smart Monitoring via Mobile App

Remote monitoring for convenient operation

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🌐 www.alpsolarr.com

ROSA Series T2

Three Phase Hybrid Inverter



Model	5kW	6kW	8kW	10kW	12kW
Battery Data					
Battery Type	Lithium-ion & Lead-acid				
Rated Battery Voltage (Vdc)	400				
Battery Voltage Range (Vdc)	135~800				
Max. Charge/Discharge Current (A)	33/33				
PV Input					
Max. Input Power (W)	7500	9000	12000	15000	18000
Max. Input Voltage (Vdc)	1000				
Rated Input Voltage (Vdc)	600				
Start-Up Voltage (Vdc)	120				
MPPT Voltage Range (Vdc)	180~900				
No. Of MPPT/ Strings Per MPPT	2/1+1				
Max Input Current Per MPPT (A)	16/16				
Max. Short Circuit Current Per MPPT (A)	20/20				
Grid Input & Output					
Rated Grid Voltage (Vac)	3L/N/PE, 400				
Rated Grid Frequency (Hz)	50				
Rated Grid-Tied Power (W)	5000	6000	8000	10000	12000
Rated Grid-Tied Current (A)	7.3	8.7	11.6	14.5	17.4
Max Grid-Tied Apparent Power (VA)	5500	6600	8800	11000	13200
Max Grid-Tied Current (A)	8.4	10	13.4	16.7	20
Max Input Apparent Power (VA)	5500	6600	8800	11000	13200
Max Input Current (A)	8.4	10	13.4	16.7	20
Total Harmonic Distortion (THDi)	< 3%				
Displacement Power Factor	0.8 leading to 0.8 lagging				
Backup Data					
Rated Output Power (W)	5000	6000	8000	10000	12000
Rated Output Current (A)	7.3	8.7	11.6	14.5	17.4
Rated Output Frequency (Hz)	50				
Overload Capability	110%, continuous; 150%, 10s				
Switch Time (ms)	≤10				
Total Harmonic Distortion (THDv)	< 3%				
Efficiency					
Max. Efficiency	97.5%	97.5%	97.8%	98%	98.4%
Euro Efficiency	96.8%	97.1%	97.1%	97.3%	97.3%
MPPT Efficiency	99.9%				
Protection					
Integrated	PV Reverse-polarity Protection, PV Insulation Detection, Ground Fault Monitoring, Over Current Protection, Over Voltage Protection				
Surge Protection	DC Type II / AC Type II				
Over Voltage Category	DC Type II / AC Type III				
AFCI	Optional				
General Data					
Operating Temperature (°C)	-25 ~ +60 (Above 45°C Derating)				
Dimensions [W*H*D] (mm)	565*465*197				
Weight (kg)	31				
Topology	Transformerless				
Cooling	Natural Cooling				
Altitude (m)	≤3000				
Protection Level	IP66				
Communication	RS485, WiFi/GPRS, CAN2.0				
Warranty	5 Years (Standard) / 10 Years (Optional)				
Max. No. of Parallel Units	6				
Standard					
Grid Standards	VDE-AR-N 4105, VDE0126-1-1, EN50549, CEI 0-21/16, EIFS, PSG, TOR				
Safety Standards	IEC/EN 62109-1, IEC/EN 62109-2				
EMC Standards	EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021, EN 61000-3-12:2011, EN IEC 61000-3-11:2019				