



Sine wave inverters

AJ series

The AJ range consists of sine wave inverters that convert a battery's DC voltage into AC voltage, which can be used by all electrical appliances.

Features and performances

- High and steady efficiency.
- Outstanding overload capabilities.
- Digital regulation and control by microprocessor.
- Electrical supply to any type of appliance.
- Full internal protection.
- Battery lifetime optimization (B.L.O.) function.
- Supplied with battery and AC cables.

AJ series

AJ 275-12
AJ 350-24
AJ 400-48



AJ series

AJ 500-12
AJ 600-24
AJ 700-48



AJ series

AJ 1000-12
AJ 1300-24



AJ series

AJ 2100-12
AJ 2400-24



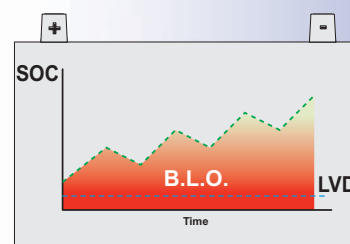
E₂₄

Norm E certification

The AJs in 12 and 24Vdc are certified to the ECE-R 10 norm.

Battery Lifetime Optimization: B.L.O.

With this function the AJ inverters offer an advanced protection of the battery, by a smart management of the low voltage disconnection (LVD).



AJ range	Output power P30/Pnom	Battery voltage	AC voltage	Solar option (-S)
AJ 275-12 (-S)	275 VA / 200 VA	12 Vdc	230 Vac*	10 A
AJ 350-24 (-S)	350 VA / 300 VA	24 Vdc	230 Vac*	10 A
AJ 400-48 (-S)	400 VA / 300 VA	48 Vdc	230 Vac*	10 A
AJ 500-12 (-S)	500 VA / 400 VA	12 Vdc	230 Vac*	15 A
AJ 600-24 (-S)	600 VA / 500 VA	24 Vdc	230 Vac*	15 A
AJ 700-48 (-S)	700 VA / 500 VA	48 Vdc	230 Vac*	15 A
AJ 1000-12 (-S)	1000 VA / 800 VA	12 Vdc	230 Vac*	25 A
AJ 1300-24 (-S)	1300 VA / 1000 VA	24 Vdc	230 Vac*	25 A
AJ 2100-12 (-S)	2100 VA / 2000 VA	12 Vdc	230 Vac*	30 A
AJ 2400-24 (-S)	2400 VA / 2000 VA	24 Vdc	230 Vac*	30 A

* For the 120Vac/60HZ version, -01 is added to the model designation.
Complete technical specifications on pages 30-31.

Accessoire



JT8 Remote control

Enables the control (ON/OFF) and the remote display (ON / Standby / Temporary off).
(supplied with a 5 m cable)

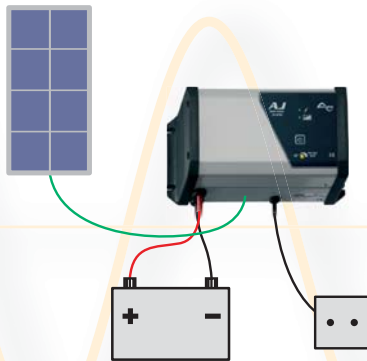
AJ 1000-12, AJ 1300-24
AJ 2100-12, AJ 2400-24

Option plug for remote control RCM

Connection (plugs male and female) to start/stop an inverter AJ under certain circumstances :

- RCM 01: ON when a contact is closed.
- RCM 02: ON when a voltage is present on the plug.
- RCM 03: ON when a contact is open.

For the AJ inverters 275 to 700VA.
Supplied with a «connector Jack» 3.5 mm.



Option built-in solar charge controller

For a complete solar system !

The models AJ can be supplied equipped with an optional integrated solar charge controller, making the inverter an « all in one » device for a solar installation.

Rural electrification (Solar Home System)

The rural electrification and the inverters of the AJ series: excellence to the benefit of the development of remote areas and populations. Choosing AC voltage for the rural electrification systems is going for simplicity, reliability and cost saving. Indeed, compared with a DC voltage one, a system with an inverter is often more efficient from 100W of solar power.

The AJ series, due to its overload capability and to its very reliable stand-by system adjustable from 1W, is the most suitable range of inverters to meet the rural electrification technical and economical requirements.



Technical sheets

AJ series



Model	AJ 275-12	AJ 350-24	AJ 400-48	AJ 500-12	AJ 600-24	AJ 700-48	
Inverter							
Nominal battery voltage	12V	24V	48V	12V	24V	48V	
Input voltage range	10.5 – 16V (24V max.)	21 – 32V (44V max.)	42 – 64V (64V max.)	10.5 – 16V (24V max.)	21 – 32V (44V max.)	42 – 64V (64V max.)	
Continuous power @ 25°C	200VA	300VA	300VA	400VA	500VA	500VA	
Power 30 min. @ 25°C	275VA	350VA	400VA	500VA	600VA	700VA	
Power 5 min. @ 25°C	350VA	500VA	600VA	575VA	675VA	900VA	
Power 5 sec. @ 25°C	450VA	650VA	1000VA	1000VA	1200VA	1400VA	
Maximum asymmetric load	150VA	150VA	200VA	250VA	300VA	300VA	
Max. efficiency (%)	93%	94%	94%	93%	94%	94%	
Cos φ max.	0.1 – 1 up to 200 VA	0.1 – 1 up to 300 VA	0.1 – 1 up to 300 VA	0.1 – 1 up to 400VA	0.1 – 1 up to 500VA	0.1 – 1 up to 500VA	
Detection of the load	2W (only with the solar option -S)			Adjustable: 1 → 20W			
Current of short-circuit 2 sec. (exit)	2.3A (4.6A*)	3.2A (6.4A*)	4.6A (9.2A*)	5.2A (10.4A*)	5.7A (11.4A*)	7A (14A*)	
Output voltage	Sine wave 230Vac (120Vac*) 0 / - 10%						
Frequency	50Hz (60Hz*) ± 0.05% (crystal controlled)						
Distortion THD (resistive load)	< 5% (@ Pnom.)						
Consumption Stand-by	0.3W**	0.5W**	1.1W**	0.4W	0.6W	1.5W	
Consumption « ON » no load	2.4W	3.5W	5.2W	4.6W	7.2W	12W	
Overheat protection (+/-5°C)	Shut down @ 75°C - Auto-restart @ 70°C						
Overload and short circuit protection	Automatic disconnection with 2 time restart attempt						
Reverse polarity protection	Protected by internal fuse						
Deep discharge battery protection	Shut off @ 0.87 x Unom - Automatic restart @ Unom						
Max. battery voltage	Shut off @ >1.33 x Unom - Automatic restart @ < Umax						
Acoustic alarm	Before low battery or overheating disconnection						
General data							
Weight	2.4 kg	2.6 kg		4.5 kg			
Dimensions	142mm x 163mm x 84mm			142mm x 240mm x 84mm			
Protection index IP	IP 30 conforms to DIN 40050						
Certification ECE-R 10 (E24)	•	•	Not available	•	•	Not available	
EC conformity	EN 61000-6-1, EN 61000-6-3, EN 55014, EN 55022, Dir. 89/336/EEC, LVD 73/23/EEC						
Operating temperature	-20°C up to +50°C						
Relative humidity in operation	95% without condensation						
Ventilation forced	From 45°C ± 5°C						
Acoustic level	< 45 dB (with ventilation)						
Warranty	2 years						
Approximate correction of Pnom	-1.5%/°C since +25°C						
Recommended battery capacity	> 5 x Pnom/Unom (recommended value in Ah)						
Length cables (Battery/left AC)	1.2m / 1m			1.5m / 1m			
Options		AJ 275-12-S	AJ 350-24-S	AJ 400-48-S	AJ 500-12-S	AJ 600-24-S	AJ 700-48-S
Solar regulator	Voltage max.	25V	45V	90V	25V	45V	90V
	Current max.	10A			15A		
	Principle	Floating 3 stages (I/U/UO)					
	Absorption voltage	14.4V	28.8V	57.6V	14.4V	28.8V	57.6V
	Floating voltage	13.6V	27.2V	54.4V	13.6V	27.2V	54.4V
Plug for remote control (RCM)		•	•	•	•	•	•

* 120Vac/60Hz on request

** Standby with solar option -S

Data may change without any notice.

AJ series



Model	AJ 1000-12		AJ 1300-24		AJ 2100-12		AJ 2400-24		
Inverter									
Nominal battery voltage	12V		24V		12V		24V		
Input voltage range	10.5 – 16V (24V max.)		21–32V (44V max.)		10.5 – 16V (20V max.)		21–32V (40V max.)		
Continuous power @ 25°C	800VA		1000VA		2000VA		2000VA		
Power 30 min. @ 25°C	1000VA		1300VA		2100VA		2400VA		
Power 5 min. @ 25°C	1200VA		2000VA		2450VA		2800VA		
Power 5 sec. @ 25°C	2200VA		2800VA		5000VA		5200VA		
Maximum asymmetric load	500VA		600VA		1000VA		1200VA		
Max. efficiency (%)	93%		94%		92% @ 300VA		94% @ 300VA		
Cos φ max.	0.1 – 1 up to 800VA		0.1 – 1 up to 1000VA		0.1 – 1 up to 2000VA		0.1 – 1 up to 2000VA		
Detection of the load	Adjustable: 1 → 20W								
Current of short-circuit 2 sec. (exit)	10A (20A*)		13A (26A*)		26A (52A*)		30A (60A*)		
Output voltage	Sine wave 230Vac (120Vac*) 0 / -10%								
Frequency	50 Hz (60Hz*) ± 0.05% (crystal controlled)								
Distortion THD (resistive load)	< 5% (@ Pnom. & Uin nom.)								
Consumption Stand-by	0.7W		1.2W		0.7W		1.2W		
Consumption «ON» no load	10W		13W		16W		16W		
Overheat protection (+/-5°C)	Shut down @ 75°C - Auto-restart @ 70°C								
Short circuit protection	Automatic disconnection with 2 time restart attempt								
Reverse polarity protection	Protected by internal fuse 125A		Protected by internal fuse 100A		Not protected		Protected by internal fuse 150A		
Deep discharge battery protection	Shut off @ 0.87 x Unom - Automatic restart @ Unom								
Max. battery voltage	Shut off @ >1.33 x Unom - Automatic restart @ < Umax								
Acoustic alarm	Before low battery or overheating disconnection								
General data									
Weight	8.5 kg				19 kg		18 kg		
Dimensions	142mm x 428mm x 84mm				273mm x 399mm x 117mm				
Protection index IP	IP 30 conforms to DIN 40050				IP 20 conforms to DIN 40050				
Certification ECE-R 10 (E24)	•		•		•		•		
EC conformity	EN 61000-6-1, EN 61000-6-3, EN 55014, EN 55022, Dir. 89/336/EEC, LVD 73/23/EEC								
Operating temperature	-20°C up to +50°C								
Relative humidity in operation	95% without condensation								
Ventilation forced	From 45°C ± 5°C								
Acoustic level	< 45 dB (with ventilation)								
Warranty	2 years								
Approximate correction of Pnom	-1.5%/°C since +25°C								
Recommended battery capacity	> 5 x Pnom/Unom (recommended value in Ah)								
Length cables (Battery/left AC)	1.5m / 1m				1.7m / 1m				
Options		AJ 1000-12-S		AJ 1300-24-S		AJ 2100-12-S		AJ 2400-24-S	
Solar regulator	Voltage max.	25V		45V		25V		45V	
	Current max.	25A				30A			
	Principle	Floating 3 stages (I/U/UO)							
	Absorption voltage	14.4V		28.8V		14.4V		28.8V	
	Floating voltage	13.6V		27.2V		13.6V		27.2V	
Remote control JT8 supplied with 5 m cable		•		•		•		•	

* 120Vac/60Hz on request

Data may change without any notice.