



EnerSolis Series Off-Grid Photovoltaic Charger

Buck-1000W/Buck-1500W

The Buck-1000/1500 developed by Ablerex can be used universally for 12, 24, 36 and 48 V. Its broad DC input voltage range makes sensible system configuration possible for almost all PV modules. Thanks to the integrated MPP tracking, the charger guarantees an energy yield that is 15 – 30 % higher than that of conventional shunt and serial charge controllers. Auto-selection three-stage (Bulk/Pulse/Float) charge mode to reduce 1~3 times charge time and maximize system performance. What is unique about charge controllers of this power range is the high protection class, and the broad temperature range that makes worldwide use even in harsh ambient conditions possible. The easy installation and completely automatic customization of the controller settings by the SA series make its commissioning very easy.

EnerSolis Series
Off-Grid Photovoltaic Charger

Model	Buck-1000W	Buck-1500W
Input		
Rated Voltage	40V~120V	
MPPT Range / Operating Voltage	40~120V @ 12Vbat 40~120V @ 24Vbat 50~120V @ 36Vbat 60~120V @ 48Vbat	
Current(Max.)	25A	35A
Max. PV Array Open Circuit Voltage	150Vdc	
Output		
Nominal Battery Voltage	12/24/36/48Vdc	
Max. Charger/Output Current	40A	60A
Max. PV Array Power	1000W	1500W
Ripple Voltage	<±1V	
Max. Efficiency	95%	
Charge mode	Bulk/Pulse/Float1/Float2 or Bulk/Float1/Float2	
DISPLAY		
Status on LCD	Solar Cell Input Voltage / Solar Cell Input Current/Solar Cell Input Power /Bat. Voltage /Bat. Current /Bat. Ampere-hours/ IGBT temperature /Bat. temperature/Voltage setting table, etc.	
Status on LED	Normal/Fault/PV Low	
PROTECTION		
Overload	>110% shutdown and retry 5 times after 15sec.	>105% shutdown and retry 5 times after 15sec.
Short Circuit at load side	Output current>60A shutdown	
Solar Cell Polarity Error Protection	Yes	
Battery Temperature Compensation(Optional)	(-3.3mV/ /cell)	
Standby Power Consumption	0W	
Total Power Consumption while operating	3.5W	
ALARMS		
Visible	Fault, PV Low, Bat. Abnormal, etc.	
PHYSICALS CHARACTERISTICS		
Mechanical Dimensions WxHxDmm	165x330x85mm	
Input/Output Connectors	Hardwire(Terminal Block)	
Enclosure Type	IP20	
Net Weight(Kgs)	3.2	
ENVIRONMENT		
Operating Temperature	-20 to +60	
Storage Temperature	-40 to +85	
Altitude	0-2000M up to 60 C; 0-3000M up to 55 C	
Humidity	100% RH Maximum, No Condensing	
INTERFACE COMPUTER		
Type	Standard RS232	
COMPLIANCE		
Quality	ISO9001	
Standard EMC	EN61000-6-1, EN61000-6-3	
Marking	CE	
Patent Pending		
Part No.	Taiwan: 97147246	
	China: 200810180491.7	
	USA: 12/273,669	

