



Smart
PowerBox

S2.0-24

INDOOR POWER SYSTEM

with an Intelligent Control Setup

Secure your Battery Life
for at least **3** Years &
your Lighting for **24** hours



PromoTech
CREATIVE MANUFACTURING



Smart PowerBox S2.0-24

It converts the solar energy into electrical energy, appropriate for indoor family usage (home appliances), apartments, chalets, farms, radio base stations, Islands and boarder areas that has no electricity coverage or blackouts...
It's provided with an intelligent control system to secure the battery life, and your house lighting for 24 hours. it also keeps a safe Power Bank for light or any other important appliances you need.

Our Smart PowerBox S2.0-24 encloses:

- Solar Charger Controller
- Inverter
- AC Charger
- LCD Display Panel
- Intelligent Voltmeter
- Cables & plugs

Need more Power?

Take advantage and use our external Battery Bank that comes along with the Smart PowerBox and enjoy a 24 hours of electricity!



Inverter Data sheet

General specification	Power star LW
Input Wave Form:	Sine wave (Utility or Generator)
Nominal Voltage:	120VAC 230VAC
Low Voltage Trip:	90V±4% 184V/154V±4%
Low Voltage re engage:	100V±4% 194V/164V±4%
High Voltage Trip:	140V±4% 253V±4%
High Voltage re engage:	135V±4% 243V±4%
Max Input AC Voltage:	150VAC 270VAC
Nominal Input Frequency:	50Hz or 60Hz (Auto detect)
Low freq trip:	47Hz for 50Hz, 57Hz for 60Hz
High freq trip:	55Hz for 50Hz, 65Hz for 60Hz
Output wave form:	50Hz or 60Hz (Auto detect)
Overload protection:	Circuit breaker
Short circuit protection:	Circuit breaker
Transfer switch rating:	30amp or 40amp
Efficiency on line transfer mode:	95%+
Line transfer time:	10ms Typical
Bypass without battery connected:	Yes
Max bypass current:	30amp or 40amp
Bypass over load current:	35amp or 45amp: Alarm
Inverter Specification/output	
Output wave form:	Pure sine wave
Output continuous power Watts:	2000 3000
Output continuous power VA:	2000 3000
Power factor:	0.9-1.0
Nominal output voltage rms:	120/230VAC
Output voltage regulation:	±1% 10% RMS
Output frequency:	50Hz ± 0.3Hz or 60Hz ± 0.3Hz
Nominal efficiency:	>88%
Surge ratings:	3000 6000 9000 1200 1500 18000
Short circuit protection:	Yes, fault after 10 secs
Inverter Specification/input	
Nominal input voltage:	24V
Minimum start voltage:	20V
Low battery alarm:	21V
Low battery trip:	20V
High voltage alarm:	32V
Power saver:	Below 25 watts when enabled
Power saver:	Same switched on/off on remote
Charger Mode specification	
Input voltage range:	194/243VAC (W)
Output voltage:	Dependent on battery type
Charger current:	35A
Battery initial voltage for start up:	0-15.7v for 12v (*2 for 24v, *4 for 48v)
Over charge protection shutdown:	15.7v for 12v (*2 for 24v, *4 for 48v)
Charger curve (4 stage constant current) Battery types	
4 step digital controlled progressive charge	
Battery type:	Fast V Float V (*2 for 24v)
Gel U.S.A	14.0 13.7
A.G.M 1	14.1 13.4
A.G.M 2	14.6 13.7
Sealed Lead Acid	14.4 13.6
Gel Euro	14.4 13.8
Open Lead Acid	14.8 13.3
Calcium	15.1 13.6
Desulphation	15.5 for 4hrs

Solar Charger Controller Data Sheet

Rated Voltage	12/24Vdc	Protection class	IP21
Rated charge current (include load current)	40 Amp	Battery temperature sensor	BTS - optional remote battery temperature sensor for increased charging precision
Load current	15 Amp	Terminal size (Fine/Single wire)	#8 AWG (10mm2)
Input voltage range	15-55 Vdc		
Max. PV open circuit array voltage	55 Vdc		
Overload protection (DC load)	2.0 * Inom>5s 1.5 * Inom>20s 1.5 * Inom temperature controlled		
Typical idle consumption	At idle < 10mA		
Bulk charge	14.6Vdc (default) 29.2Vdc (default)		
Floating charge	13.4Vdc (default) 26.8Vdc (default)		
Equalization charge	14.0Vdc (default) 28.0Vdc (default)		
Over charge disconnection	14.8Vdc 29.6Vdc		
Over discharge disconnection	10.8Vdc (default) 21.6Vdc (default)		
Over discharge reconnection	12.3Vdc 24.6Vdc		
Temperature compensation	-13.2mV/°C -26.4mV/°C		
Lead acid battery settings	Adjustable		
NiCad battery settings	Adjustable		
Load control mode	1. Low Voltage Reconnect (LVR): Adjustable 2. Low Voltage Disconnect (LVD): Automatic Disconnection 3. Reconnection: Includes warning flash before disconnect and reconnection		
Low voltage reconnect	12.0-14.0Vdc 24.0-28.0Vdc		
Low voltage disconnect	10.5-12.5Vdc 21.0-25.0Vdc		
Ambient temperature	0-40°C (full load) 4-60°C (de-rating)		
Altitude	Operating 5000m, Non-Operating 16000m		