



smarTEC

Technologies

Pure Sine Wave inverter / charger



USA technologies



Lebanese made power

Seeking

Dealer in Arab countries

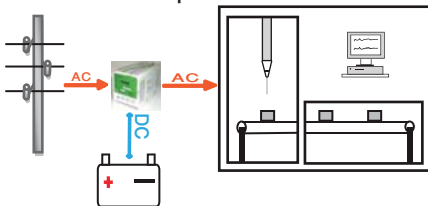


**6 stage charger
Including equalizer**

max. load : Up to short-circuit
max. asymmetric load : Up to P_{cont}
max. efficiency : 90%

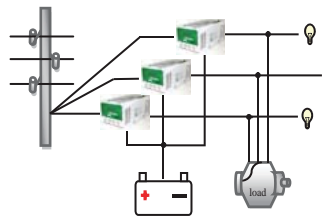
Dynamic behavior: 5ms(on load change 0 to 100%)
Overload and short-circuit: Automatic disconnection up to 10 times restart attempt

Process Backup :



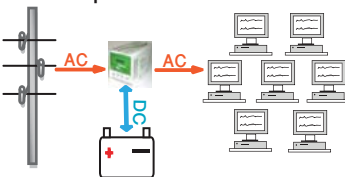
The grid directly supplies the machinery and devices directly through the inverter/charger "bypass" function. In case of a power drop or a cutoff from the grid, the machinery and devices. For instance, this allows machinery tools to run to the end of a cycle ; without any interruption.

3 Phase in and 3 Phase out:



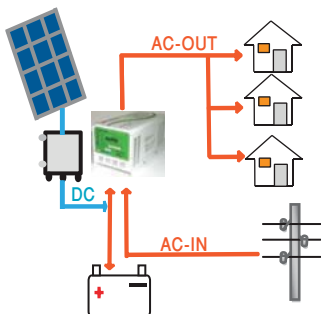
- Three phase source for a three phase power supply.
- The grid supplies the elevator directly through the inverter "bypass" function. In case of power drop or a cutoff from the grid ,the inverter secures the supply to the elevator ,It can run for 24 hours for residential building in normal use without grid power.

Compuer :



The grid supplies the computer directly through the inverter "bypass" function .In case of a power drop or a cutoff from the grid. the inverter secures the supply to the user.

Hybrid System :



A Hybrid system is a combination of different energy sources producing renewable energy (solar, wind, hydro) and a diesel/gas generator .(the generator provides flexibility to the system) . In this diagram the SMARTEC inverter is connected to a battery bank and to a generator supplying energy to all kinds of electrical appliances. The battery bank can be recharged by different renewable energy such as solar charger and/or the generator which is automatically managed by the inverter. The SMARTEC inverter has a special power assistant for the generator that helps to maintain stable operation for the generator. In comparison with a 100% green energy system ,the hybrid system is the most economical.



S m a r t e c

iPower Series

DC-AC Inverter ~ Pure Sine Wave

Model
iPS 3700-24

Features and performances

- Outstanding efficiency and overload.
- Perfect management and limitation of AC sources.
- Power shaving of the consumption peaks.
- Automatic allocation of the power available.
- Active filtering of the load steps on the genset.
- Automatic protection of the sources against overload.
- Powerful multi-stage PFC charger.
- Ultra-short transfer time (from 0 to 15ms max.).
- Automatic and efficient stand-by.
- Compatible with AC coupling.
- Display, programming and data logging.
- RS-232 communication for remote supervision.
- Dim. : 44.50x20(LxWcm) , 17.50 x 7.87 (LxW inch)
- Weight : 25Kg (55lbs)



2 YEAR WARRANTY Parts & Labor *

Model	iPS 3700-24
Inverter	
Nominal battery voltage	24V
Input voltage range	19 - 34V
Continuous power @ 25°C	2000W
Power 30 min. @ 25°C	2800W
Power 25 sec. @ 25°C	5.6kVA
Maximum load	Up to short-circuit
Maximum asymmetric load	Up to Pcont.
Load detection (stand-by)	2 to 25 W
Maximum efficiency	90%
Consumption OFF/Stand-by/ON	1.4W / 1.6W / 36W
Output voltage	Sine wave 220Vac (+/- 2%) / 190-245Vac
Dynamic behavior	5 ms (on load change 0 to 100%)
Overload and short-circuit	Automatic disconnection up to 10 times restart attempt
Overheat protection	Warning before shut - with automatic restart
Battery charger 6 step adjustable : I-U-Uo-Equalize-Uo(low)-U(periodic)	
Charging current adjustable	0 - 45A
Maximum input voltage	265Vac
Input AC voltage range	Adjustable threshold from 150 to 265Vac
Battery control	
Absorption end	By duration 2 / 0.25 - 10 h or by current - / 4 - 30A
Absorption voltage**	28.8 / 19 - 34V
Periodic absorption voltage**	19 - 34V
Floating voltage**	27.2 / 19 - 34V
Reduced floating voltage	19 - 34V
Equalization**	By number of cycles (1 - 100) or at set interval (52 weeks)
Equalization end	By duration 4 / 0.25 - 10 h or by current - / 4 - 30A
Deep-discharge protection	21.6 / 19 - 34V
Reduced floating time	0 - 32 days
Periodic absorption time	0 - 10 hours
General data	
iPS 3700-24	
Auxiliary Output	2 independent Transistor short circuit protected outputs
Auxiliary Input	2 Opto Coupler Programmable Input 10V → 60VDC
Physical Weight	25Kg (55lbs)

*Reverse polarity not under warranty

** Programmable

iPower Series

DC - AC Inverter | Model
 ~ Pure Sine Wave | **IPS 3700-24**

When a maintenance free iPS3700-24 unit is connected to your in-house electrical installation, it will automatically supply electricity in case of power failure, providing high quality regulated AC power where needed!

Please see the table on the right for some of the most important appliances with their approximate Power Consumption Ratings.

APPLIANCE	POWER RATING
Energy Lamps	~ 5 – 15 W
Fluorescent Lamp	~ 40 W
Air Fan	~ 50 W
12000 BTU Air Conditioner	~ 1300 W
Refrigerator / Freezer	~ 100 – 200 W
Washing Machine	~ 300 W cold water – 1500 W hot water
Dish washer	~ 1500 W
Iron	~ 1000 W
Water Pump	½ Hp ~ 400 – 1 Hp 800 W
Microwave Cooker	~ 1300 W
42-inch LCD TV	~ 200 W
Desktop Computer System	~ 350 W
Camera System	~ 250 W

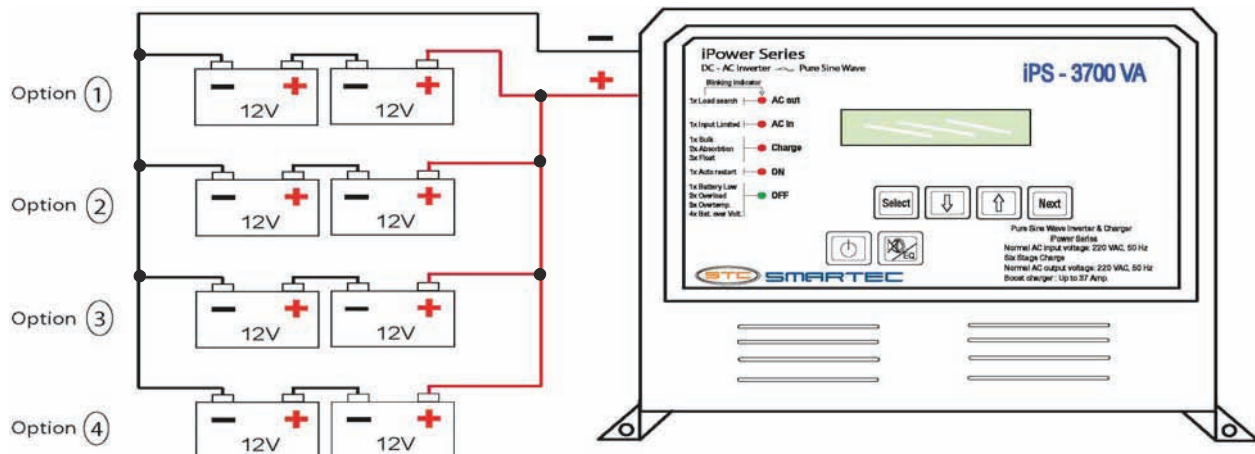


Battery Expansion is simple and effective as shown on the diagram below and based on the 3.7KVA (24V DC-Input).

2 YEAR WARRANTY Parts & Labor

iPS Can Withstand Peak Power 5.6KVA

The iPS-3700 can expand using 4 options – batteries, to suit every need, thus being able to provide a very long quality backup time! (CROWN BATTERIES are recommended).



Continuous Load		2 Batteries 150 Amp.	4 Batteries 150 Amp.	2 Batteries 200 Amp.	4 Batteries 200 Amp.	2 Batteries 220 Amp.	4 Batteries 220 Amp.	2 Batteries 240 Amp.	4 Batteries 240 Amp.
Watt	Amp.	Actual Runtime in HOURS							
500	2.3 Amp.	4.32	9	5.76	11.52	6.33	12.67	6.9	13.8
900	4.2 Amp.	2.4	4.8	3.2	6.4	3.52	7.04	3.84	7.68
1200	5.5 Amp.	-----	3.6	2.4	4.8	2.64	5.28	2.88	5.76
2000	9.0 Amp.	-----	-----	-----	2.8	-----	3.16	-----	3.45



S m a r t e c

iPower Series

DC-AC Inverter ~ Pure Sine Wave

Model
iPS 7000-48



Features and performances

- Outstanding efficiency and overload.
- Perfect management and limitation of AC sources.
- Power shaving of the consumption peaks.
- Automatic allocation of the power available.
- Active filtering of the load steps on the genset.
- Automatic protection of the sources against overload.
- Powerful multi-stage PFC charger.
- Ultra-short transfer time (from 0 to 15ms max.).
- Automatic and efficient stand-by.
- Compatible with AC coupling.
- Display, programming and data logging.
- RS-232 communication for remote supervision.
- Dim. : 50.8 x 29.4 (LxWcm) , 20 x 11.57 (LxW inch)
- Weight : 50Kg (110 lbs)

2 YEAR WARRANTY Parts & Labor *

Model	iPS 7000-48
Inverter	
Nominal battery voltage	48V
Input voltage range	38 - 68V
Continuous power @ 25°C	5000W
Power 30 min. @ 25°C	6500W
Power 25 sec. @ 25°C	11.2 kVA
Maximum load	Up to short-circuit
Maximum asymmetric load	Up to Pcont.
Load detection (stand-by)	2 to 25 W
Maximum efficiency	90%
Consumption OFF/Stand-by/ON	1.4W / 1.6W / 50 W
Output voltage	Sine wave 220Vac (+/- 2%) / 190-245Vac
Dynamic behavior	5 ms (on load change 0 to 100%)
Overload and short-circuit	Automatic disconnection up to 10 times restart attempt
Overheat protection	Warning before shut - with automatic restart
Battery charger 6 step adjustable : I-U-Uo-Equalize-Uo(low)-U(periodic)	
Charging current adjustable	0 - 45A
Maximum input voltage	265Vac
Input AC voltage range	Adjustable threshold from 150 to 265Vac
Battery control	
Absorption end	By duration 2 / 0.25 - 10 h or by current - / 4 - 30A
Absorption voltage**	57.6 / 38 - 68V
Periodic absorption voltage**	38 - 68 V
Floating voltage**	54.4 / 38 - 68V
Reduced floating voltage	38 - 68 V
Equalization**	By number of cycles (1 - 100) or at set interval (52 weeks)
Equalization end	By duration 4 / 0.25 - 10 h or by current - / 4 - 30A
Deep-discharge protection	64.8 / 38 - 68V
Reduced floating time	0 - 32 days
Periodic absorption time	0 - 10 hours
General data	
iPS 7000-48	
Auxiliary Output	2 independent Transistor short circuit protected outputs
Auxiliary Input	2 Opto Coupler Programmable Input 10V → 60VDC
Physical Weight	50 Kg (110 lbs)

*Reverse polarity not under warranty

** Programmable

When a maintenance free iPS7000 – 48 unit is connected to your in-house electrical installation, it will automatically supply electricity in case of power failure, providing high quality regulated AC power where needed!

Please see the table on the right for some of the most important appliances with their approximate Power Consumption Ratings.

APPLIANCE	POWER RATING
Energy Lamps	~ 5 – 15 W
Fluorescent Lamp	~ 40 W
Air Fan	~ 50 W
12000 BTU Air Conditioner	~ 1300 W
Refrigerator / Freezer	~ 100 – 200 W
Washing Machine	~ 300 W cold water – 1500 W hot water
Dish washer	~ 1500 W
Iron	~ 1000 W
Water Pump	½ Hp ~ 400 – 1 Hp 800 W
Microwave Cooker	~ 1300 W
42-inch LCD TV	~ 200 W
Desktop Computer System	~ 350 W
Camera System	~ 250 W

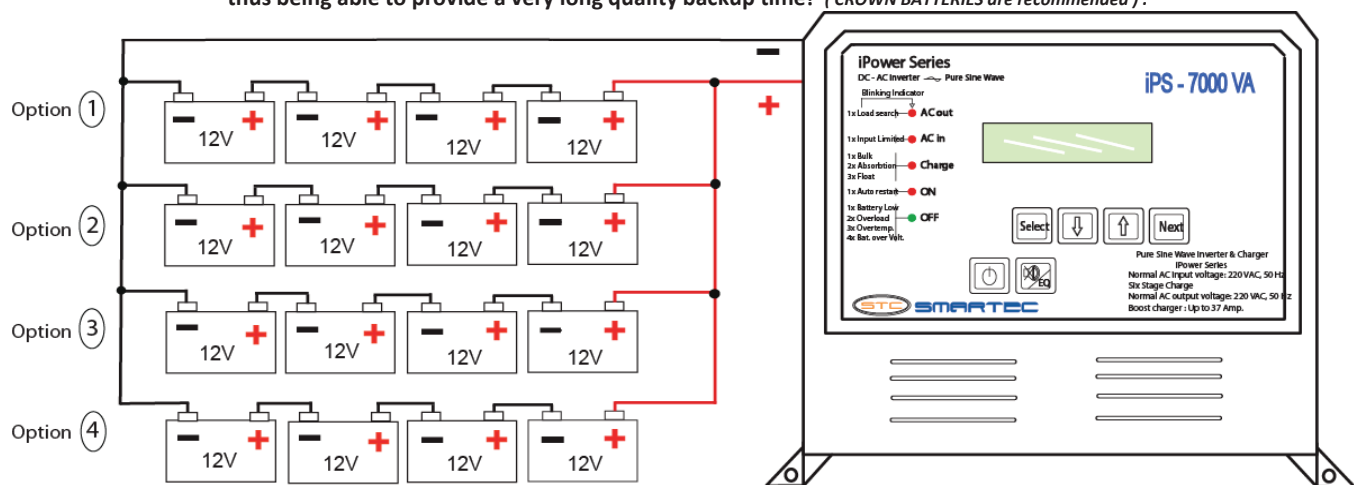


Battery Expansion is simple and effective as shown on the diagram below and based on the 7KVA (48V DC-Input).

2 YEAR WARRANTY Parts & Labor

iPS Can Withstand Peak Power 11.2KVA

The iPS-7000 can expand using 4 options – batteries, to suit every need, thus being able to provide a very long quality backup time! (CROWN BATTERIES are recommended).



Continuous Load		4 Batteries 150 Amp.	8 Batteries 150 Amp.	4 Batteries 200 Amp.	8 Batteries 200 Amp.	16 Batteries 200 Amp.
Watt	Amp.	Actual Runtime in HOURS				
500	2.3 Amp.	9.4	18.8	12.5	25	50
1100	5 Amp.	4.25	8.5	6	12	24
1600	7 Amp.	-----	6	4	8	16
2200	10 Amp.	-----	4.25	3	6	12
3500	16 Amp.	-----	3	-----	4	8



S m a r t e c

iPower Series

DC-AC Inverter ~ Pure Sine Wave

Model
iPS 1600-12

Features and performances

- Outstanding efficiency and overload.
- Perfect management and limitation of AC sources.
- Power shaving of the consumption peaks.
- Automatic allocation of the power available.
- Automatic protection of the sources against overload.
- Ultra-short transfer time (from 0 to 15ms max.).
- Automatic and efficient stand-by.
- [Weight : 17Kg](#)



2 YEAR WARRANTY Parts & Labor *

Model	iPS 1600-12
Inverter	
Nominal battery voltage	12V
Input voltage range	12 - 34V
Continuous power @ 25°C	1000W
Power 30 min. @ 25°C	1200W
Power 25 sec. @ 25°C	2.4kVA
Maximum load	Up to short-circuit
Maximum efficiency	88%
Consumption OFF/Stand-by/ON	1.4W / 1.6W / 36W
Output voltage	Sine wave 220Vac (+/- 2%) / 190-245Vac
Overload and short-circuit protection	Automatic disconnection up to 10 times restart attempt
Overheat protection	Warning before shut - with automatic restart
Battery charger 6 step adjustable : I-U-Uo-Equalize-Uo(low)-U(periodic)	
Charging current adjustable	0 - 30A
Maximum input voltage	265Vac
Input AC voltage range	Adjustable threshold from 150 to 265Vac
Battery control	
Absorption end	By duration 2 / 0.25 - 10 h or by current - / 4 - 30A
Absorption voltage**	28.8 / 19 - 34V
Periodic absorption voltage**	19 - 34V
Floating voltage**	27.2 / 19 - 34V
Reduced floating voltage	19 - 34V
Equalization**	By number of cycles (1 - 100) or at set interval (52 weeks)
Equalization end	By duration 4 / 0.25 - 10 h or by current - / 4 - 30A
Deep-discharge protection	21.6 / 19 - 34V
Reduced floating time	0 - 32 days
Physical Weight	17.4Kg

*Reverse polarity not under warranty



S m a r t e c

iPower Series

DC - AC Inverter

~ Pure Sine Wave

Model

IPS 1600-12

When a maintenance free iPS 1600-12 unit is connected to your in-house electrical installation, it will automatically supply electricity in case of power failure, providing high quality regulated AC power where needed!

Please see the table on the right for some of the most important appliances with their approximate Power Consumption Ratings.



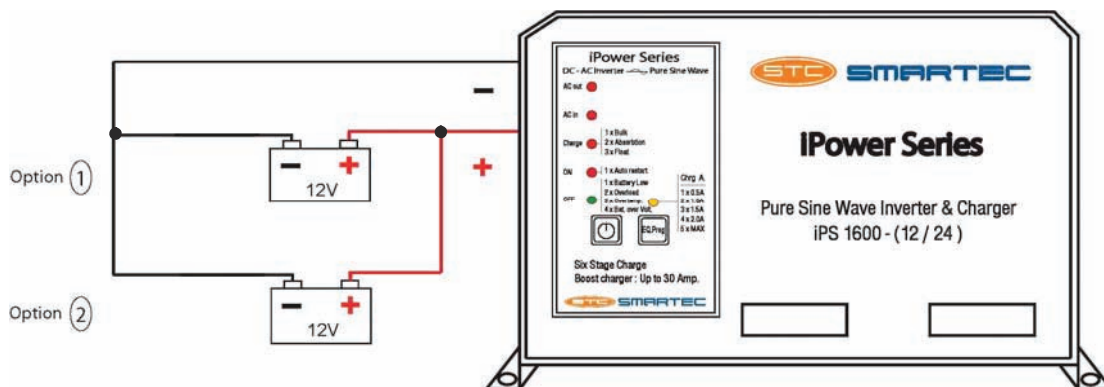
APPLIANCE	POWER RATING
Energy Lamps	~ 5 – 15 W
Fluorescent Lamp	~ 40 W
Air Fan	~ 50 W
12000 BTU Air Conditioner	~ 1300 W
Refrigerator / Freezer	~ 100 – 200 W
Washing Machine	~ 300 W cold water – 1500 W hot water
Dish washer	~ 1500 W
Iron	~ 1000 W
Water Pump	½ Hp ~ 400 – 1 Hp 800 W
Microwave Cooker	~ 1300 W
42-inch LCD TV	~ 200 W
Desktop Computer System	~ 350 W
Camera System	~ 250 W

Battery Expansion is simple and effective as shown on the diagram below and based on the 1.6KVA (12V DC-Input).

2 YEAR WARRANTY Parts & Labor

iPS Can Withstand Peak Power 2.6KVA

The iPS-1600 can expand using 4 options – batteries, to suit every need, thus being able to provide a very long quality backup time! (CROWN BATTERIES are recommended).



IPS 1600-12

Continuous Load		1 Batteries 100 Amp.	2 Batteries 100 Amp.	1 Batteries 150 Amp.	2 Batteries 150 Amp.	1 Batteries 200 Amp.	2 Batteries 200 Amp.
Watt	Amp.	Actual Runtime in HOURS					
300	1.4 Amp.	2.8	5.6	4.2	8.4	5.6	11.2
500	2.3 Amp.	1.7	3.4	2.6	5	3.4	6.8
900	4.2 Amp.	-----	-----	-----	2.8	-----	4



S m a r t e c

iPower Series

DC-AC Inverter ~ Pure Sine Wave

Model
iPS 1600-24

Features and performances

- Outstanding efficiency and overload.
- Perfect management and limitation of AC sources.
- Power shaving of the consumption peaks.
- Automatic allocation of the power available.
- Automatic protection of the sources against overload.
- Ultra-short transfer time (from 0 to 15ms max.).
- Automatic and efficient stand-by.
- [Weight : 17Kg](#)



2 YEAR WARRANTY Parts & Labor *

Model	iPS 1600-24
Inverter	
Nominal battery voltage	24V
Input voltage range	12 - 34V
Continuous power @ 25°C	1000W
Power 30 min. @ 25°C	1200W
Power 25 sec. @ 25°C	2.4kVA
Maximum load	Up to short-circuit
Maximum efficiency	88%
Consumption OFF/Stand-by/ON	1.4W / 1.6W / 36W
Output voltage	Sine wave 220Vac (+/- 2%) / 190-245Vac
Overload and short-circuit protection	Automatic disconnection up to 10 times restart attempt
Overheat protection	Warning before shut - with automatic restart
Battery charger 6 step adjustable : I-U-Uo-Equalize-Uo(low)-U(periodic)	
Charging current adjustable	0 - 30A
Maximum input voltage	265Vac
Input AC voltage range	Adjustable threshold from 150 to 265Vac
Battery control	
Absorption end	By duration 2 / 0.25 - 10 h or by current - / 4 - 30A
Absorption voltage**	28.8 / 19 - 34V
Periodic absorption voltage**	19 - 34V
Floating voltage**	27.2 / 19 - 34V
Reduced floating voltage	19 - 34V
Equalization**	By number of cycles (1 - 100) or at set interval (52 weeks)
Equalization end	By duration 4 / 0.25 - 10 h or by current - / 4 - 30A
Deep-discharge protection	21.6 / 19 - 34V
Reduced floating time	0 - 32 days
Physical Weight	17.4Kg

*Reverse polarity not under warranty

When a maintenance free iPS1600-24 unit is connected to your in-house electrical installation, it will automatically supply electricity in case of power failure, providing high quality regulated AC power where needed!

Please see the table on the right for some of the most important appliances with their approximate Power Consumption Ratings.

APPLIANCE	POWER RATING
Energy Lamps	~ 5 – 15 W
Fluorescent Lamp	~ 40 W
Air Fan	~ 50 W
12000 BTU Air Conditioner	~ 1300 W
Refrigerator / Freezer	~ 100 – 200 W
Washing Machine	~ 300 W cold water – 1500 W hot water
Dish washer	~ 1500 W
Iron	~ 1000 W
Water Pump	½ Hp ~ 400 – 1 Hp 800 W
Microwave Cooker	~ 1300 W
42-inch LCD TV	~ 200 W
Desktop Computer System	~ 350 W
Camera System	~ 250 W

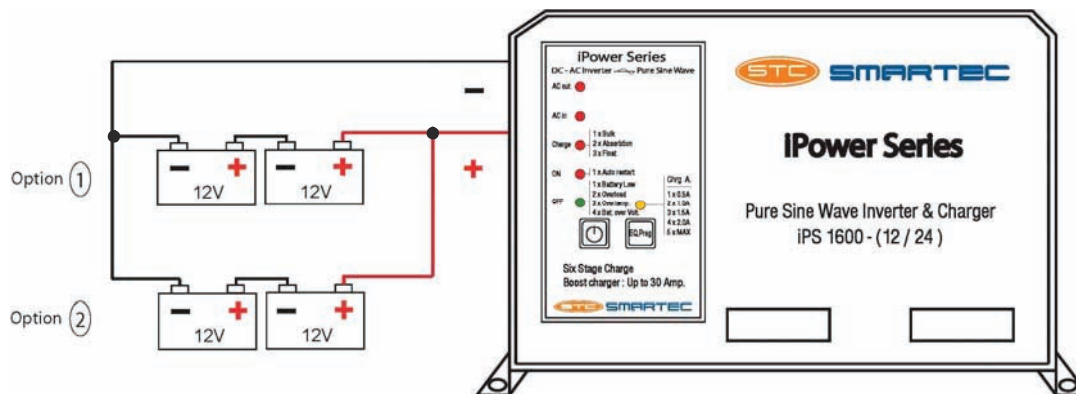


Battery Expansion is simple and effective as shown on the diagram below and based on the 1.6KVA (24V DC-Input).

2 YEAR WARRANTY Parts & Labor

iPS Can Withstand Peak Power 2.6KVA

The iPS-1600 can expand using 4 options – batteries, to suit every need, thus being able to provide a very long quality backup time! (CROWN BATTERIES are recommended).



iPS 1600-24

Continuous Load		2 Batteries 100 Amp.	4 Batteries 100 Amp.	2 Batteries 150 Amp.	4 Batteries 150 Amp.	2 Batteries 200 Amp.
Watt	Amp.	Actual Runtime in HOURS				
300	1.4 Amp.	5.6	11.2	8.4	16.8	11.2
500	2.3 Amp.	3.4	6.8	5	10	6.8
900	4.2 Amp.	-----	-----	2.8	5.6	4

iPower Series Inverter/Charger



S m a r t e c

iPower Series

Pure Sine Wave Inverter



**Unit combining inverter,
Battery charger and bypass transferring system.**

iPS-1600 VA (12)V iPS-1600 VA (24)V

Nominal battery voltage	12/24V
Continuous power @ 25°C	1000 W
Power 30 min. @ 25° C	1200 W
Power 25sec. @ 25° C	2.4 KW
Charging current adjustable	0-30 A
Input voltage :	150-265 VAC

iPS-3700 VA (24)V Single phase OR 3 Phase system (up to 10 Kva)

Nominal battery voltage	24V
Continuous power @ 25°C	2000 W
Power 30 min. @ 25° C	2800 W
Power 25 sec. @ 25° C	5.6KW
Charging current adjustable	0-45 A
Input voltage:Adjustable threshold from 150 to 265 Vac	

iPS-7000 VA (48)V Single phase OR 3 Phase system (up to 20 Kva)

Nominal battery voltage	48V
Continuous power @ 25°C	5000 W
Power 30 min. @ 25° C	6500 W
Power 25 sec. @ 25° C	14.3 KW
Charging current adjustable	0-45 A
Input voltage:Adjustable threshold from 150 to 265 Vac	