

## PRO LCD Series Characteristics



### On Inverter

- High overload ability up to 300% rated power (1 ms)
- LCD display to see and change parameters

### On Battery Charger

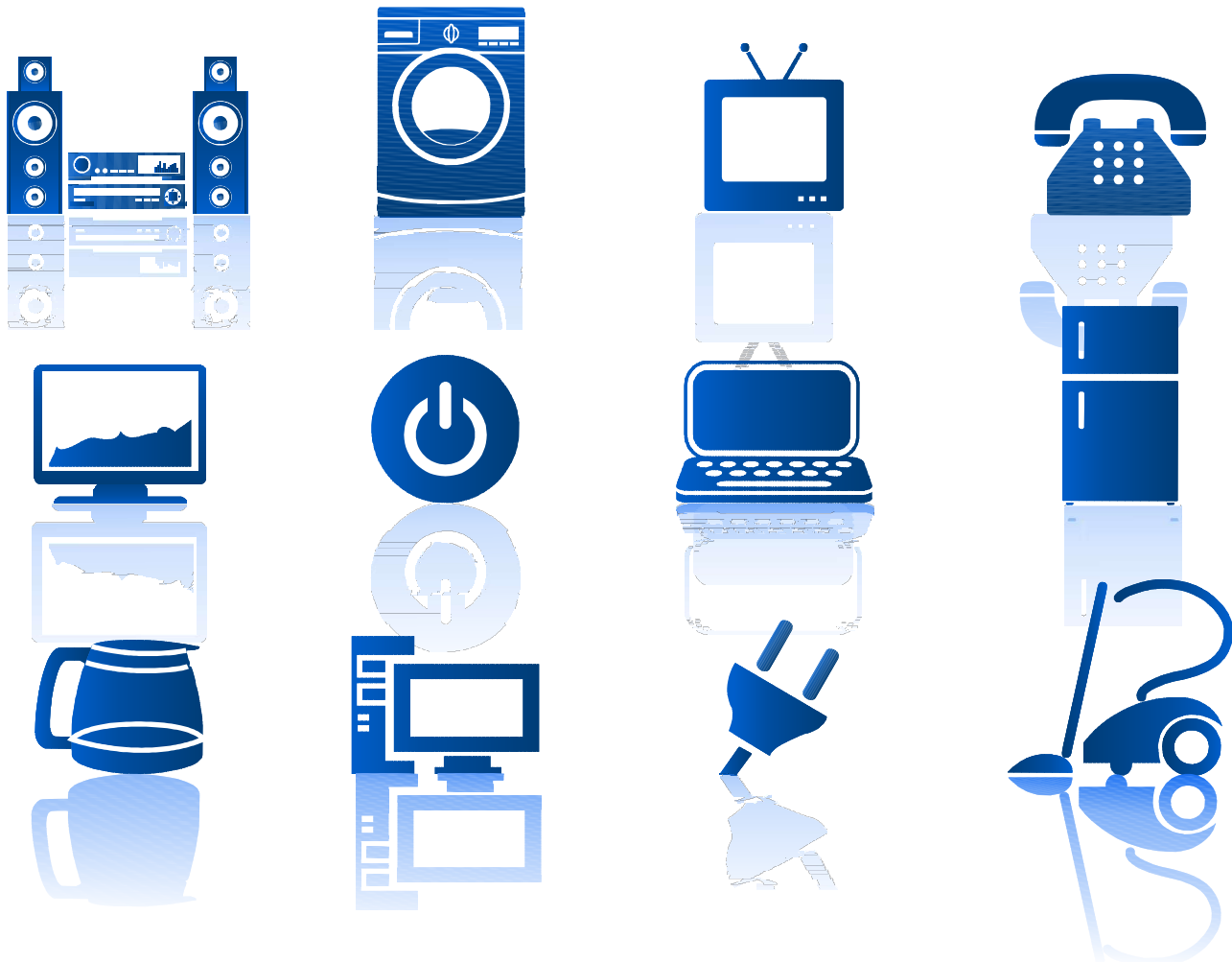
- 4-step intelligent battery charging
- Uses PFC(power factor correction) for charger

### On Transfer

- 10ms typical transfer time
- 5 to 20 s delay before transfer when AC resumes

### Option

- Battery/AC priority switch Available for off grid solar/ wind system
- Remote Control (OPTIONAL)
- Battery Temperature Sensor (OPTIONAL)



## Applications



- Pure sine wave
- Microprocessor control
- Auto-Test Auto Function
- Typical 8 mS transfer, Max. 10mS
- Full, sustainable power for continuous backup
- LCD Display (Indicates: VDC, IDC, VAC, Frequency, % battery charge, % load on output, fault code, etc.)
- LED Indicators (Load, Invert, Line, Fault)
- Solar Power Server RS232 (Optional)
- Our PRO LCD has a 4 stages charger with 8 load profiles for all types of batteries: Lead Acid, AGM, GEL, etc.
- Desulphation function
- High efficiency charger
- Automatic Voltage Regulator with Wide Input Range (Optional)
- Electronic protections: Output short circuit, Battery discharged, Overload, Overvoltage, etc.
- Multiple acoustic alarm: Low bat and High bat, Overload, Over temp, etc.
- 300% @ 1mS overload capacity
- Adjustable charging current
- Inverter-Line Transfer Delay
- Compatible with generators
- Priority Mode Batteries (Solar Energy Management)
- Voltage surges

### AC Input Range:

There are different acceptable AC input ranges for different kinds of loads. It can be customized :

110V mode: 110V / 115V / 120V

220V mode: 220V / 230V / 240V

### AC/Battery Priority:

Our inverter is designed AC priority by default. This means, when AC input is present, the battery will be charged first, and the inverter will transfer the input AC to power the load.

The AC priority and Battery Priority switch is available upon request. When you choose battery priority, the inverter will invert from battery despite the AC input.

### Protection against:

Peak voltage, transients, voltage sags, electrical noise, blackouts, surges, etc.

CHARACTERISTICS / PRO LCD model	1012	1512	2024	2524	3024	3624	4024	5048	6048	
<b>OUTPUT BATTERY MODE</b>										
Wave form:	Pure sine wave / Harmonic distortion < 3%									
Continues Power Output (Watts)	1000	1500	2000	2500	3000	3600	4000	5000	6000	
Power Factor Correction	0.9									
Nominal Output voltage rms	Programmable: 110, 115, 120 or 220, 230,240 VAC									
Voltage regulation on battery mode:	Nominal +/- 3%									
Output Frequency	50Hz ± 0.3Hz o 60Hz ± 0.3Hz									
Peak Efficiency	Efficiency: >88 % Bat. mode > 95 % Line mode									
Power peak Output	3000	4800	6000	7500	9000	10800	12000	15000	18000	
Short Circuit Protection	Yes, with failure signaling after one second									
<b>GENERAL ESPECIFICATION ON LINE MODE</b>										
Input wave form	Sine wave (Utility or Generator)									
Input nominal voltage	120 Vac or 240 Vac									
Input nominal frequency	50Hz or 60Hz (Automatic Detection )									
Low Frequency transfer	46 Hz for 50 Hz and 55 Hz for 60Hz									
High Frequency transfer	54 Hz for 50 Hz, 65 Hz for 60Hz									
Output wave form	(Modo Bypass) same as input									
Overload protection	Circuit breaker									
Short Circuit Protection	Circuit breaker									
Protection Breaker (charger and output load) :	2 X 30 AMPS breakers					2 X 40 AMPS breakers				
Transfer relay capacity	30 Amps		40 Amps				60 Amps			
Line mode efficiency (Bypass):	Min. 95%									
Transfer time	8mS typical y 10 mS max.									
Battery not connected Bypass	Yes									
Bypass maximum current	Same as Relay transfer									
Bypass overcharge current	35 Amps		45 Amp				70 Amps			
<b>WITH AVR</b>										
Max. Input voltage	0-160Vac or 0-320Vac									
Voltage regulation	120 Vac+/-10% o 240 Vac +/-10% RMS									
Input AC Voltage	75-160V+/-4% or 150-320V+/-4%									
Reconnection voltage	Bajo: 85V+/-4% and Alto: 150V+/-4%									
<b>WITHOUT AVR</b>										
Max. Input voltage	0-150Vac or 0-300Vac									
Low cut OFF input voltage	85Vac± 4% or 170 Vac ± 4%									
Low reconnection voltage	90 Vac ± 4% o 180 Vac ± 4%									
High cut OFF input voltage	135Vac ± 4% or 270 Vac ± 4%									
High reconnection voltage	130v ± 4% or 260 ± 4%									
<b>DC INPUT (Batteries)</b>										
Nominal input voltage DC	12 Vdc		12 o 24v		24v		48v			
Inverter Start up minimum voltage	10 Vdc				20v		40v			
Low battery alarm	10.5 Vdc				21v		42v			
Low voltage inverter shutdown	10 Vdc				20v		40v			
Alarm high voltage:	16 Vdc				32v		64v			
Open Circuit consumption	Power Saver ON < 0.2 AMP and Power Saver OFF < 1.5AMP									
Charger Start up minimum battery voltage	8 V (*2 for 24 V; *4 for 48 V)									
<b>CHARGING MODE</b>										
Input voltage range without AVR:	85-135 Vac or 170-270 Vac									
Input voltage range with AVR:	75-160 Vac or 150-320 Vac									
Output voltage	Depending on type of battery and charge status									
Maximum charge current (Adjustable 0 to 100%)	35 A	50 A	70/35 A		40A		50A	60A	70A	
Apagado por sobrecarga de batería:	15.7 Vdc for 12 Vdc (*2 for 24Vdc; *4 for 48 Vdcv)									
<b>8 CURVES OF CHARGE, 4 STEPS OF CHARGE, DIGITALLY CONTROLLED</b>										
Gel U.S.A, AGM 1, AGM 2, Sealed Lead Acid, Gel EURO, Open Lead Acid, Calcium, De-Sulfation function @4h (EQUALIZE)										
Absorption voltage: 14, 14.1, 14.6, 14.4, 14.4, 14.8 y 15.1 respectively										
Multiply. (*2 @24v; *4 @48v)										
Flotation voltage: 13.7, 13.4, 13.7, 13.6, 13.8, 13.3, 13.6 respectively										
<b>DIMENSIONES</b>										
Models 1100/2000/2500/3000: 442*218*179mm <sup>3</sup>					Models 4000/5000/6000 : 598*218*179mm <sup>3</sup>					
Weight	17 Kg	19 Kg	21.5 Kg	23.5 Kg	24.5 Kg	26 Kg	30.5kg	37 Kg	39 Kg	

NOTE: Especifications may change without previous notice.

# Diagram

