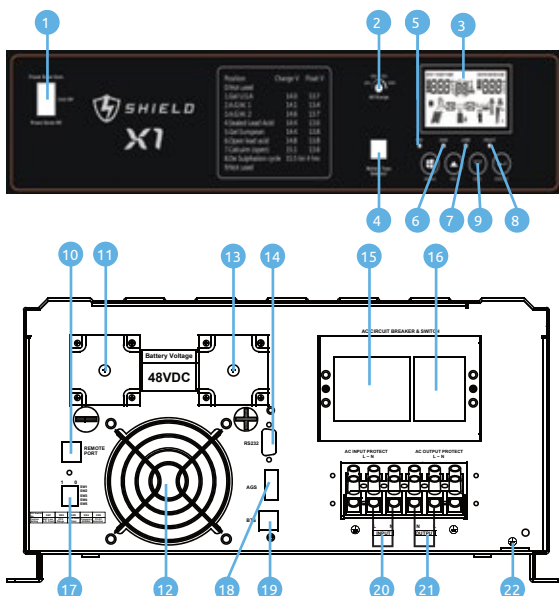


The Shield X1 range of inverter chargers is engineered with a built-in pure copper UI transformer to make it lasting and reliable. This inverter charger gives you a pure sine wave output and charges your batteries using our three stage charging to maximize the life of your batteries.

The inverter charger's high efficiency makes sure of a lower OPEX. Its low noise does not cause disturbance near installation areas. You can access the X1's parameters via its LCD panel and check warnings or operation with the LEDs.



- Rated power of 8KW to 12KW.
- Pure sine wave output, ideal for all equipment.
- Max 100A charging current coupled with 3 stage charging for longer life of batteries.
- Adjustable charge current for various applications (25%, 50%, 75%, 100%).
- Built in pure copper UI transformer.
- Automatic signal for starting generator.
- DC start and auto self-diagnosis function.
- Supports RS485 communication. Can be used for remote monitoring.
- Battery or AC priority function.
- Quiet operation, less noise around installation area.
- LED and LCD readings for diagnosis and reporting.



## Display and connections

- |                               |                                  |
|-------------------------------|----------------------------------|
| 1. Power saver on/off switch  | 12. Fan                          |
| 2. Ac charger current setting | 13. Battery +ve                  |
| 3. LCD display                | 14. RS485/CAN communication port |
| 4. Battery Voltage Setting    | 15. AC input/Bypass breaker      |
| 5. Inverter indicator         | 16. AC output breaker            |
| 6. Charging indicator         | 17. Function Switch(SW1-SW5)     |
| 7. Grid indicator             | 18. AGS                          |
| 8. Fault indicator            | 19. BTS                          |
| 9. Function                   | 20. AC Input                     |
| 10. Remote port               | 21. AC Output                    |
| 11. Battery -ve               | 22. Ground                       |

## Specification sheet

System model	X1-8	X1-10	X1-12
System capacity	8KW	10KW	12KW
Nominal Battery Voltage	48VDC	48VDC	48VDC
<b>Inverter Output</b>			
Surge rating (20ms)	24KW	30KW	36KW
Capable Of Starting Electric Motor	4HP	5HP	6HP
Output waveform	Pure sine wave/ same as input (bypass mode)		
Inverter Efficiency (Peak)	>88%		
Line mode efficiency	>95%		
Power factor	1.0		
Nominal output voltage RMS	220V/230V/240VAC (+/-10% RMS)		
Output frequency	50Hz/60Hz +/-0.3 Hz		
Short circuit protection	Yes (1sec after fault)		
Typical transfer time	10ms (max)		
<b>AC Input</b>			
Voltage	230VAC		
Selectable Voltage Range	155~280VAC(For Personal Computers)		
Frequency Range	50HZ/60HZ (Auto sensing) 40~80Hz		
<b>Battery</b>			
Minimum start voltage	20.0VDC/21.0VDC for 24VDC mode (40.0VDC/42.0VDC for 48VDC mode)		
Low battery alarm	21.0VDC+/-0.3V for 24VDC mode (42.0VDC+/-0.6V for 48VDC mode)		
Low battery Cutoff	20.0VDC+/-0.3V for 24VDC mode (40.0VDC+/-0.6V for 48VDC mode)		
High voltage alarm	32.0VDC+/-0.3V for 24VDC mode (64.0VDC+/-0.6V for 48VDC mode)		
High battery voltage recover	31.0VDC+/-0.3V for 24VDC mode (62.0VDC+/-0.6V for 48VDC mode)		
Idle consumption-search mode	<35W when power saver on		
<b>Charger</b>			
Output voltage	Depends on battery type		
Charger AC input breaker rating	40A	50A	63A
Max charge power rate	1/3 Rating power		
Overcharge protection S.D.	62.8VDC		
Maximum Charge Current	70A	80A	100A
<b>BTS</b>			
Temperature rate @25°C	4mv charging voltage descent, per 1°C rise		
<b>Bypass &amp; Protection</b>			
Input voltage waveform	Sine wave (grid or generator)		
Nominal voltage	220V/230V/240VAC		
Max input AC voltage	300VAC For 230VAC HV mode		
Nominal input frequency	50Hz or 60Hz		
Overload protection (SMPS load)	Circuit breaker		
Output short circuit protection	Circuit breaker		
Bypass breaker rating	80A		
Max bypass current	80A		
<b>Mechanical Specifications</b>			
Mounting	Wall mount		
Inverter dimensions (W*H*D)	670*410*215mm		
Shipping dimensions (W*H*D)	802*533*429.5mm		
<b>Other</b>			
Operation Temperature Range	0°C to 40°C		
Storage Temperature	-15°C to 60°C		
Audible Noise	60dB MAX		
Display	LED + LCD		