PIR SERIES

Modified Sine Wave Inverters



PIR-1000

1000 W (resistive load)



PIR-1500

1500 W (resistive load)



PIR-2500

2500 W (resistive load)



PIR-3500

3500 W (resistive load)

Customer _____

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PIR SERIES

Contents and Approval

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Prepared by	Reviewed by	Approved by

Customer Approval

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QA Department		
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Approval		

PIR SERIES

Revision History and Overview

Series	Revision	Date
PIR	R3	2026-11-16

This specification covers the PIR-1000, PIR-1500, PIR-2500 and PIR-3500 modified sine wave inverters.

Designed for 12 V battery systems with 120 V AC output.

Equipped with 4 North American AC output sockets.

Detachable LCD control panel supports wired remote control.

LCD displays battery input voltage, output power and fault status.

Equipped with USB-A and USB-C PD charging ports.

Provides input overvoltage/undervoltage, overload, overtemperature and output short-circuit protection.

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Electrical Specifications

Parameter	PIR-1000	PIR-1500	PIR-2500	PIR-3500
Output waveform	Modified sine wave	Modified sine wave	Modified sine wave	Modified sine wave
Continuous output power (resistive load)	1000 W	1500 W	2500 W	3500 W
Surge output power	2000 W	3000 W	5000 W	7000 W
DC input voltage range	10 - 15 VDC	10 - 15 VDC	10 - 15 VDC	10 - 15 VDC
AC output voltage (13 V input)	120 VAC ±10%	120 VAC ±10%	120 VAC ±10%	120 VAC ±10%
Output frequency	60 ± 3 Hz	60 ± 3 Hz	60 ± 3 Hz	60 ± 3 Hz
Maximum efficiency (13 V input)	84%	84%	84%	84%
Typical no-load current (13 V input)	0.8 A	2 A	1.4 A	1.1 A
Operating ambient temperature	0 - 40°C	0 - 40°C	0 - 40°C	0 - 40°C

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Protection Functions

Parameter	PIR-1000	PIR-1500	PIR-2500	PIR-3500
Input undervoltage alarm	10.5 ± 0.5 VDC	10.5 ± 0.5 VDC	10.5 ± 0.5 VDC	10.5 ± 0.5 VDC
Input low-voltage shutdown	10 ± 0.5 VDC	10 ± 0.5 VDC	10 ± 0.5 VDC	10 ± 0.5 VDC
Output overload shutdown threshold	1300 ± 300 W	1800 ± 300 W	2800 ± 300 W	3800 ± 300 W
Internal fuses	40 A × 3	30 A × 6	30 A × 8	40 A × 8
Input overvoltage protection	Supported	Supported	Supported	Supported
Output short-circuit protection	Supported	Supported	Supported	Supported
Overtemperature protection	Supported	Supported	Supported	Supported
Fault indication	Red backlight, fault code and audible alarm	Red backlight, fault code and audible alarm	Red backlight, fault code and audible alarm	Red backlight, fault code and audible alarm

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Interfaces and Controls

Parameter	PIR-1000	PIR-1500	PIR-2500	PIR-3500
Number of AC output sockets	4	4	4	4
Number of USB-A ports	1	1	1	1
USB-A output	5 V / 3 A; 9 V / 2 A; 12 V / 1.5 A	5 V / 3 A; 9 V / 2 A; 12 V / 1.5 A	5 V / 3 A; 9 V / 2 A; 12 V / 1.5 A	5 V / 3 A; 9 V / 2 A; 12 V / 1.5 A
Number of USB-C ports	1	1	1	1
USB-C PD output	5 V / 0.1 - 3 A; 9 V / 0.1 - 2 A; 12 V / 0.1 - 1.5 A	5 V / 0.1 - 3 A; 9 V / 0.1 - 2 A; 12 V / 0.1 - 1.5 A	5 V / 0.1 - 3 A; 9 V / 0.1 - 2 A; 12 V / 0.1 - 1.5 A	5 V / 0.1 - 3 A; 9 V / 0.1 - 2 A; 12 V / 0.1 - 1.5 A
Maximum USB-C PD power	18 W	18 W	18 W	18 W
Control panel	Detachable LCD panel	Detachable LCD panel	Detachable LCD panel	Detachable LCD panel
Remote control	Wired control	Wired control	Wired control	Wired control
Display	Input voltage, output power and fault code	Input voltage, output power and fault code	Input voltage, output power and fault code	Input voltage, output power and fault code

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Dimensions and Weight

Parameter	PIR-1000	PIR-1500	PIR-2500	PIR-3500
Housing material	Plastic	Plastic	Plastic	Plastic
Length	≈271.8 mm	≈308.4 mm	≈369.3 mm	≈399.5 mm
Width	≈205.2 mm	≈223.5 mm	≈248.9 mm	≈277.9 mm
Height	≈108.0 mm	≈108.0 mm	≈108.0 mm	≈108.0 mm
Net weight	≈2.49 kg	≈3.15 kg	≈4.04 kg	≈4.82 kg