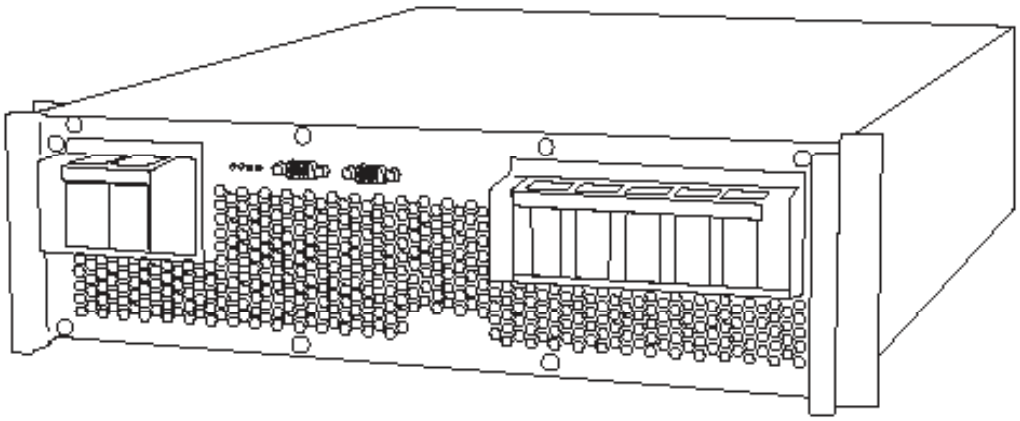
DATA SHEET

Power Conversion System

OZPCS-RS35



PRODUCT INTRODUCTION

Power Conversion System

OZPCS-RS35

With a compact, 3U form factor, the transformerless OZPCS-RS35 power conversion system installs directly into standard 19” battery racks. Front-side terminations simplify interconnect, and the fully parallelable, 35kW architecture permits easy system expansion.

Optimized for both 3-phase and split-phase grid connections, 400-800VDC battery voltages, and advanced ‘Smart Inverter’ features supporting both grid-tie and grid-forming modes, design and certification for energy storage applications doesn’t get any easier.

Key Features

Optimized for 120/208V 3-phase and 120/240V split-phase applications:
Specifically designed to perform efficiently within these voltage ranges, ensuring stability, reliability, and safety when used with either 120/208V 3-phase or 120/240V split-phase electrical systems.

Supports grid-tie and grid-forming applications:
Switch between the two depending on the situation, allowing for flexibility and robustness in different energy scenarios.

Easy paralleling allows for quick product scaling:
Allows businesses to quickly scale their operations while maintaining consistency, minimizing downtime, and ensuring flexibility for future growth.

UL1741-SB smart inverter functions:
The OZPCS-RS35 inverter can communicate with grid operators and support grid stability. UL 1741 SB builds upon the original UL 1741, focusing on how these energy systems interact with the grid, contributing to grid stability and security in a more advanced and reliable way.

3 and 4-wire transformerless grid interface:
Transformerless inverters offer a more compact, lighter, and efficient design compared to transformer-based inverters.

SunSpec Modbus certified:
SunSpec certified means that this product has been rigorously tested and conforms to SunSpec standards required to ensure it will work properly with other SunSpec-compliant devices. This certification helps ensure seamless integration and reliable operation of energy storage systems, improving overall system performance and safety. Modbus RS-485 communication protocol is typically used for industrial automation and control systems. Based on the Modbus protocol, which allows devices to communicate over a serial network. RS-485 refers to the physical layer that uses differential signaling for communication, making it robust and suitable for long-distance and noisy environments.

© 2025 Trystar, LLC. All rights reserved.

PRODUCT SPECIFICATIONS

Electrical		
	DC Connection	Operating Voltage Range: 400-800 VDC Full Power Voltage Range: 400-800 VDC Max DC Current: 92A continuous, 120A overload 10 seconds max Max DC Power: 36.5 kW. Wiring Configuration: Two wire
	AC Connection	Max AC Power: 35kVA @ 208Vrms Max AC Current: 100Arms Continuous, 130Arms overload - 10 seconds max. AC Line Voltage: 120/208Vrms 3-phase 120/240Vrms split-phase AC Line Frequency: 60 Hz Power Factor: -1 to +1 Current Harmonics: IEEE 1547 Compliant, <3%THD Typical Efficiency: 95% 3 Phase (3 or 4 wire), split phase, configurable
Environmental		
	Operating Temperature	-20°C to 45°C. Derated: 45°C to 50°C. Short term: Full power operation up to 60°C
	Operating Humidity	30 - 90% RH (no condensation)
	Operating Altitude	1,000m no derating, 1,000m - 3,000m derated
	Polution Degree	2 (IEC 1010-1)
	Ingress Protection	IP20
	Acoustic Noise	75 dBA Max. in all directions, horizontal difference of 3ft.
User Interface		
	Isolated Communication Link	Modbus RS-485
	Register Mapping	SunSpec PCS
	Isolated Digital Inputs	Emergency shutoff | Bias enable | Island control pin
	Isolated Digital Outputs	2 - user configurable
	Indicator LEDs	4
	Warranty	5 years Standard / 5 year Warranty Extension Available
Mechanical		
	Cooling	Forced air cooled by internal fan
	Weight	97 lbs.
	Dimensions	19” rack. 3.0U. See dimensional drawings
	Vibration	MIL-810E, method 514.4 test condition I-3.3.1
	Shock	Less than 20G, half sine, 11mS, unpacked
	Seismic	1G seismic zone (IEEE 693 High Seismic) with seismic spectra of 0.5G

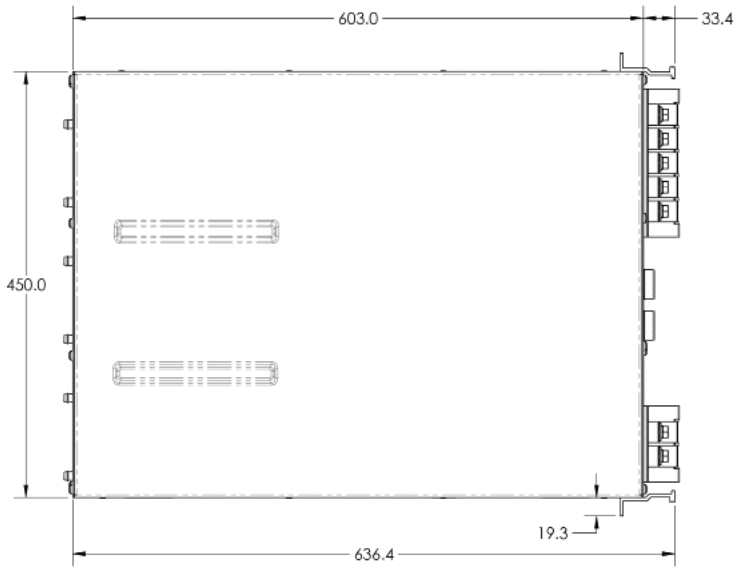
© 2025 Trystar, LLC. All rights reserved.

PRODUCT SPECIFICATIONS (cont)

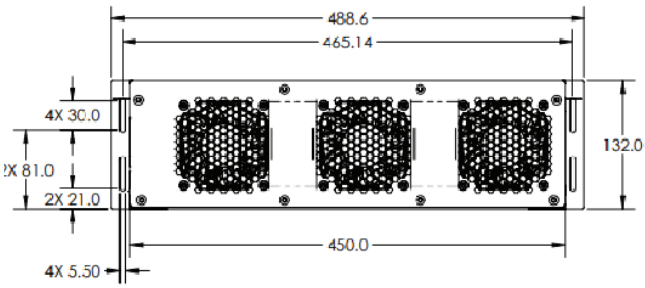
Accuracies	
AC Voltage	±1% of 208 VRMS, or ±2.08 VRMS
DC Voltage	±2% of 800 V, or ±16.0 V
AC Current	±3% of 100 ARMS, or ±3.0 ARMS
DC Current	±3% of 100 A, or ±3.0 A
Power	±3% of 35 kW/kVAR, or ±1.05kW/kVAR
Power Factor	±5%
Frequency	±0.01 Hz
Time	±0.05 sec

DIMENSIONAL DRAWINGS

Top View



Side View



ORDERING INFORMATION

Ordering Information		
Catalog Number	OZPCS-RS35	Power Conversion System

TRYSTAR

15765 Acorn Trail / Faribault, MN 55021 / 507.333.3990
Document Number: 0001DS1225 REV10/26 / © 2026 Trystar, LLC. All rights reserved.