



# OZpcs-RS40-PS

## 40kW Bi-Directional DC Power Supply

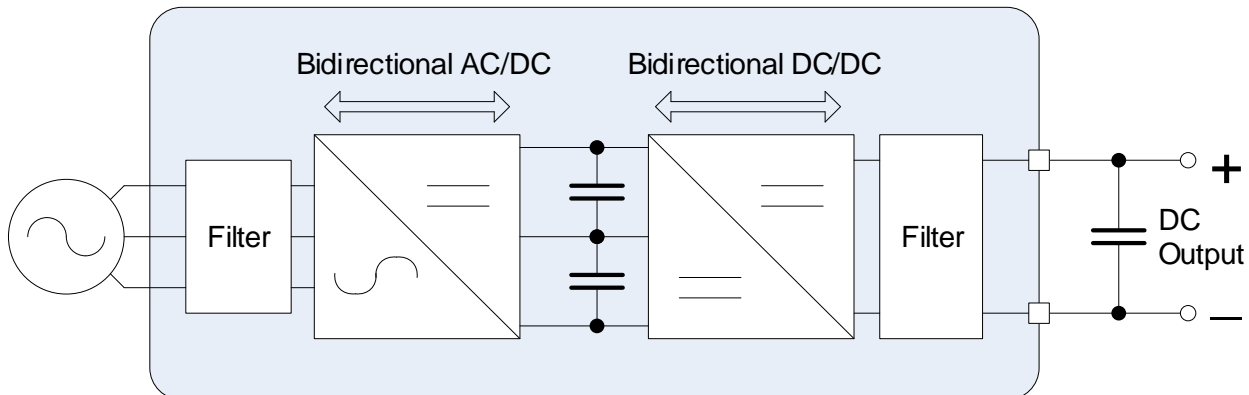
### Rack Scale™ Series



Innovative Thinking for Power Control

## Features

- Wide AC Voltage 50/60Hz Operating Range
- >0.99% Power Factor
- Compact 2.5U 19" Rack Mount
- Transformerless Design
- Front Side Interface for easy cable routing
- Modbus RS-485 Config & Control Interface
- Parallelable for High Power Applications
- Software Configurable Protection Features
- Voltage, Current, & Power Control Modes
- Variable Speed Forced Air Cooling



## Description

The OZPCS-RS40-PS is a state of the art, bidirectional, digitally controlled DC power supply. The bidirectional capability of the supply allows it to both source and sink current, regardless of the operating mode. The transition between sourcing and sinking is seamless and requires no user configuration or control.

The power supply can be controlled in one of three different modes; voltage, current, or power. In voltage control mode the supply will regulate the DC output voltage, sourcing or sinking current as required to maintain regulation.

Current control mode configures the supply as a programmable, current source or sink. The user can set and dynamically change the DC output current as required. Power control mode is similar in that the supply is configured as a programmable, DC Power source or load. The user can set and dynamically change the DC output power as required.

The supply is designed such that multiple units can be connected in parallel and operated simultaneously, using Modbus broadcast messages, to achieve higher total power capability.

The supply provides three types of data logging functions for diagnostics. Event Data Logging captures operating parameters on a fault or user configured trigger event. Fault History Logs provide time stamp and event counters for each fault source. Operating History Logs provide cumulative time spent operating under a variety of conditions, as well as min/max values of critical parameters.

All configuration and operating parameters are easily modified using the RS485 Modbus serial port and the complementary Oztek Power Studio™ Tool. In addition to configuration management, Power Studio™ provides Dashboard control of one or multiple supplies and makes field updates fast and easy.

## Performance Specifications

AC Interface	
AC Line Voltage	208 – 480 V <sub>RMS</sub>
AC Line Frequency	50/60 Hz
Rated AC Current	50 A <sub>RMS</sub>
Power Factor	>0.99%
Current Harmonics (TDD)	<5% IEEE 519
Current Harmonics (THD), rated current	<3%
CEC Efficiency	96.92%
Peak Efficiency	98.22%
Environmental Ratings	
Operating Temperature	-5°C to 40°C
Storage Temperature	-20°C to 60°C
Polution Degree	2 (IEC 1010-1)
Max Elevation	1,000m – 3,000m

DC Interface	
Output Voltage Range	0 – 820 V
Max DC Power	38kW
Max DC Curent	+/- 75A
Control Modes	<ul style="list-style-type: none"> <li>• Voltage</li> <li>• Current</li> <li>• Power</li> </ul>
User Interface	
Isolated Communication Link	RS-485
Isolated Digital Inputs	<ul style="list-style-type: none"> <li>• Emergency Shutoff</li> <li>• Bias Enable</li> </ul>
Isolated Digital Outputs	2 User Configurable
Mechanical Specifications	
Enclosure	2.5U, 19" Rack Mount
Weight	97 Lbs
Cooling	Forced Air
Ingress Protection	IPC20

## Ordering Information

### OZPCS-RS40-PS-F00

