



OZTEK

Innovative Thinking for Power Control

OZpcs-EP40

40kVA Energy Storage Power Conversion System

Environmental Protected Series



ADVANCED

Flexible

- Grid-tie operation
- Grid-forming operation
- 330 - 820 V_{DC} input
- 3 & 4 wire transformerless grid interface

Scalable

- Designed to be paralleled for high power applications.
- Compact IP54 wall mount
- Bottom-side terminations for easy cable routing
- 97% CEC efficiency

Integrated

- Black start bias supply
- AC & DC contactors
- Pre-charge circuitry
- Variable speed forced air cooling

Distributed energy storage system design just got easier. With a compact, wall-mount form factor, the transformerless **OZpcs-EP40** installs outdoors to Li-ion battery enclosures or building walls. Bottom-side terminations simplify interconnect, and the fully parallelable, 40kW architecture permits easy system expansion.

Offering wide 208-480VAC and 330-820VDC operating ranges, Grid-tie and Grid-forming operating modes, advanced "Smart Inverter" features, and design and certification for energy storage applications, system design doesn't get any easier.



SunSpec Certified



UL 1741-SA



L/HVRT & L/HFRT



V-VAR, V/W, & F/W Modes





OZpcs-EP40 Specifications

• Reduce Time to Market

- ◆ Supports grid tie and grid forming applications
- ◆ Easy paralleling allows for quick product scaling
- ◆ IP54 Outdoor rated wall-mount design

• Worldwide Application

- ◆ Wide AC voltage range
- ◆ 50/60 Hz

• Features

- ◆ UL1741-SA Smart Inverter functions
- ◆ 3 & 4 wire transformer-less grid interface
- ◆ Integrated data logging

• Industry Std Interface

- ◆ SunSpec certified
- ◆ Modbus RS-485

DC Connection

Operating Voltage Range	330 - 820 VDC
Full Power Voltage Range	550 - 820 VDC
Max DC Current	+/- 75 A
Max DC Power	40 kW
Wiring Configuration	2 Wire

AC Connection

Max AC Power	40kVA @ 480 V _{RMS}
Max AC Current	50Arms
AC Line Voltage	208 - 480 V _{RMS}
AC Line Frequency	50 / 60 Hz
Supported grid connections	3 wire & 4 wire, grounded neutral
Power Factor	-1 to +1
Current Harmonics	IEEE 1547 Compliant, <3%THD
Typical Efficiency	97 %

Environmental

Operating temp	-20°C to 40°C (rated) 60°C (max)
Cooling	Forced air by internal variable speed fans
Max Elevation	1,000m No Derating 1,000m - 3,000m Derated
Enclosure	800 x 550 x 165 mm Wall Mount
Weight	49kg / 110 Lbs
Ingress protection	IPC54

User Interface

Isolated Communication Link	Modbus RS-485
Register Mapping	SunSpec PCS
Isolated Digital Inputs	<ul style="list-style-type: none"> • Emergency Shutoff • Bias Enable
Isolated Digital Outputs	<ul style="list-style-type: none"> • User Configurable 1 • User Configurable 2
Indicator LEDs	<ul style="list-style-type: none"> • Fault • Operating • Standby • Power On
Warranty	5 years standard 5 year warranty extension available

