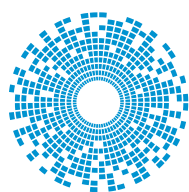




# Bel Power Solutions for Datacenters



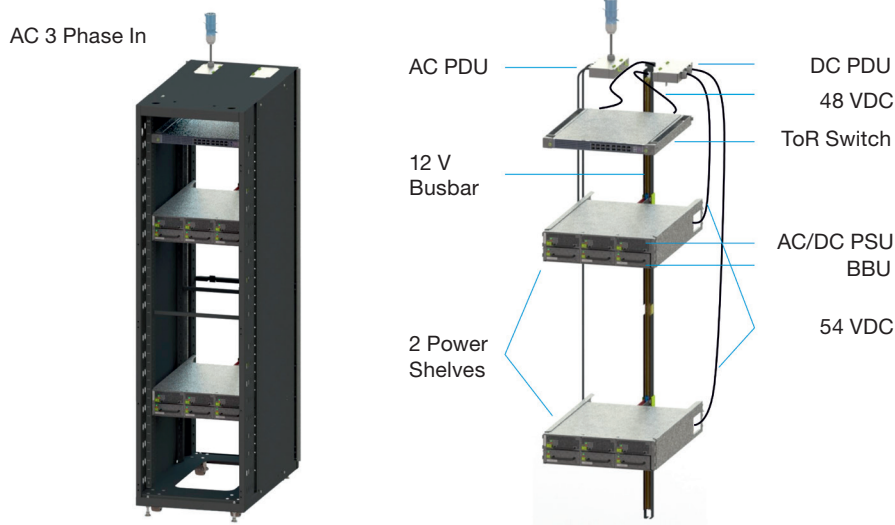
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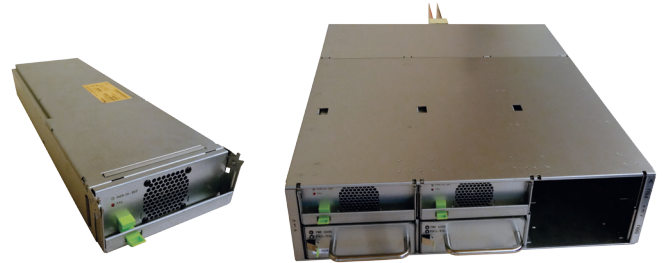
# Open Compute V2 Power Shelf & V2 Power Module

Bel Power Solutions 6600 W stand-alone V2 Power Shelf is powered from three-phase AC line, hosting three 3300 W (N + 1) hot-swappable single-phase V2 Power Modules.



## Features & Benefits

- High Efficiency > 95.9 % @ 277 Vac, 50% load
- High Power quality (Power Factor and THD)
- Redundant (2+1) output 6600 W / 12.6 Vdc with active current sharing
- Redundant (2+1) auxiliary output 600W / 54 Vdc
- Houses 3x 3300 W power supply units (PSU)
- Houses 3x 3600 W Lithium Ion Battery back-up units (BBU)
- 52.5 V input battery back-up / charger for lithium Ion battery pack
- 3-Phase 200 - 277 Vac Input to shelf
- Hot-plug capable
- Digital control for improved performance
- RS485 communication interface for control, programming & monitoring
- Status LED with fault signaling



## 240 Vac Power Distribution Unit

AC Distribution YSD.00152 EU

## 277 Vac Power Distribution Unit

AC Distribution YSD.00162 US

## DC-DC Distribution Unit

DC-DC Distribution YSD.00134



	NA, 277/480	EU, 240/415	NA, 208	NA, 277 CS	NA, 277 30A	DC PDU
Bel P/N	YSD.00162	YSD.00152	YSD.00217	YSD.00219	YSD.00218	YSD.00134
Input Voltage	277/480, 3P5W	240/415, 3P5W	208, 3P4W	277, 1P3W	277/480, 3P5W	54Vdc
Surge Circuit	Yes	Yes	No	No	Yes	No
Input Plug Type	L22-20P	IEC-309	L21-30P	L7-20P	L22-30P	N/A
Connector	HBL2521		HBL2811	HBL2331	HBL2821	
Wire Gauge	12 AWG	10 AWG	10 AWG	12 AWG	10 AWG	14 AWG
Style	2 in / 2 out	1 in / 2 out	2 in / 2 out	1 in / 1 out	1 in / 2 out	0 in / 2 out

## 3 kW Platinum & Titanium Efficiency Power Module (AC-DC)

Converts 90-300 Vac main power into a main output of 12 Vdc for powering intermediate bus architectures (IBA) in high performance and reliability servers, routers & network switches.

### Features & Benefits

- Input Voltage Range: 90-300 Vac, 240-400 Vdc
- Rated Power: 3000W (Vin > 180 Vac, Vin > 192 Vdc), 1400 W (Vin > 90 Vac)
- Standby Output (always present): 12 V / 5.0A
- Hold-up Time: ≥ 12 msec
- Communication: Physical Layer I<sup>2</sup>C, Protocol Layer PMBus™
- Redundant Operation: Analog Current Share (244 A Ishare voltage = 8 V)
- Form Factor: 1U x 69 x 555 mm

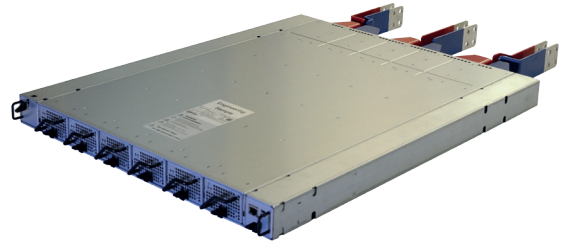


## SPSPFE3 Power Shelves

SPSPFE3 shelf provides rectification, system management, power distribution while maintaining high reliability & offering flexibility for future expansion.

### Features & Benefits

- Holds up to six PFE3000-12-069RA PSUs (up to 18 kW)
- Redundant Configurations (3+3 or 5+1)
- EU: Three-phase, 400/480 VAC Input, line to line input with Neutral line (-02G, -04G, -05G, -06G)
- US: Three-phase 208 VAC Input, line to line input, without Neutral line (-03G)
- Triple (-02G, -03G, -05G,) or Single (-04G), -06G) Output Busbar for +12 VDC
- Built-in Controller (-05G, -06G)
- I<sup>2</sup>C PMBus™, Optional Ethernet Capability
- Compatible with the OCP rack design



## DC-DC Solutions

1 OU / 15 kW N+1 DC-DC Shelf + Controller houses six 3 kW DC-DC front end power supplies.

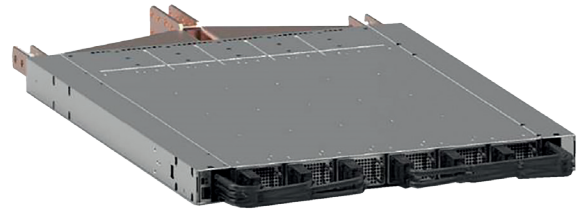
### Features & Benefits

#### 15 kW Power Shelf

- Single-Busbar Shelf compatible to OCP standard (534 mm wide)
- Holds up to six 3 kW DC-DC PSUs (N+1 redundancy)
- Height = 46 mm < 1 OpenU
- 2x 250 A busbar DC inputs
- Hot Swap controller with Ethernet communication (RJ45)
- Built-in Controller
- I<sup>2</sup>C communication interface with PMBus™

#### 3 kW Power Module

- Wide input range: 40-72 Vdc
- 12.3 Vdc Output (244 A) / 12 Vdc Standby (2 A)
- Parallel operation with active analog current sharing
- Small/Slim form factor: 69 x 42 x 555 mm
- I<sup>2</sup>C communication interface with PMBus™ protocol



## 48 V Solutions

24 kW AC-DC Power Shelf houses six 4 kW AC-DC front end power supplies.

### Features & Benefits

#### SPSTET Power Shelf

- 6x 4 kW AC-DC PSUs total 24 kW (N+1 redundancy 20 kW)
- Dual 3 phase AC input
- Single 48 V bus bars
- OCP compatible

#### TET4000-48-069RA

- Input voltage 200-277 Vac or 192-400 Vdc
- 48 V main output, programmable (42-58 Vdc)
- Standby output 12 Vdc / 60 W (Optional)
- Small form factor: 69 x 40.5 x 530 mm
- CAN communication interface

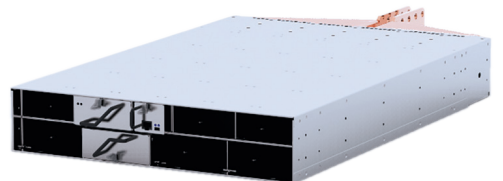


## BBU Shelf

Shelf provides 12 V backup power during AC outage.

### Features & Benefits

- 15 kW (+ 5 kW) full load for 60 s (battery EOL)
- Includes 4 BBU and 4 Charger/Dischargers
- Battery is fully isolated from 12 V busbar for maximum reliability
- All modules are hot-swappable-Senses optionally AC lines for faster AC outage detection
- The shelf includes automatic life battery test diagnostic with EOL signal
- A controller with Ethernet communication (on front panel) is included in the shelf (optional)
- Isolated CAN bus / PMBus available on the back of the shelf
- This BBU shelf independently works in conjunction with any power solution installed in the open rack







## About Bel High Power Solutions

Bel Power Solutions provides leading OCP power conversion modules and shelves. The Bel Power Shelves provide rectification, system management and power distribution, while maintaining high reliability and offering flexibility for future expansion. We continue to push for leading edge power solutions for OCP IT-Racks to Datacenters.

Bel Power Solutions is certified to both ISO9001 as well as ISO14001.



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