



an EnerSys® company

# DPX 5kW Bi-Directional Converter



- Bi-directional design offers flexible energy storage options
- High 97 percent peak efficiency for reduced OPEX and carbon footprint
- Extended operating temperature range up to 65°C (149°F) for deployment in the harshest outdoor environments
- Communication with the Cordex® CXC HP system controller for advanced site monitoring applications

**The DPX 5kW Bi-Directional Converter module is part of the distributed power transport product family specifically engineered using the new Alliance for Telecommunications Industry Solutions (ATIS) fault managed power distribution technology. The DPX 5kW Bi-Directional Converter module offers enhanced flexibility to support various battery chemistries including VRLA, Li-ion, Ni-Cd, NiMH and other technologies.**

In a compact, fan-cooled design, the DPX 5kW Bi-Directional Converter module provides full rated power up to 65°C (131°F) and 3000 watts of power up to 75°C (176°F).

Local and remote setup, adjustment and control is a simple single-step process with the system controller. By utilizing TCP/IP technology, complete configuration and monitoring of power equipment is possible through a network web browser or via local display

Distributed power transport architecture enables operators to deploy their network faster by eliminating the need to have AC utility power at each small cell location. At a central location, the central power hub converts the incoming AC power to fault managed power which is transported over a hybrid or copper only cable to a disconnect box and then to a down converter device located approximately 6000 ft away. This reduces installation and operating expenses, and provides flexibility related to site selection for the installation of the remote communications equipment.

# DPX 5kW Bi-Directional Converter

PN: 0120082-001

Electrical	
Voltage	High voltage (DC): 380 Vdc nominal
	Low voltage (Battery): 48 Vdc nominal
Efficiency	97% peak
Power	5000W Nominal
Current	Charge: 115A
	Discharge: 14A
Load Regulation	±1.5%
Transient Response	±2%
Acoustic	<60 dBA
Performance/Features	
LEDs	Alarm: Major alarm (steady red)
	DC: High voltage DC OK (steady green)
	Battery: Low voltage battery OK (steady green)
Adjustments	<ul style="list-style-type: none"> <li>High voltage bus</li> <li>High voltage alarm</li> <li>Low voltage alarm</li> <li>High voltage shutdown</li> <li>Current limit</li> <li>Start delay timers</li> </ul>
Protection	<ul style="list-style-type: none"> <li>Current limit / short circuit</li> <li>Fixed soft start in charge mode</li> <li>HV and LV fuses</li> <li>Diode-or for parallel outputs on both HV and LV</li> <li>High voltage shutdown on HV and LV</li> <li>Power limiting</li> <li>Over temperature</li> </ul>

Mechanical - Module	
Dimensions H × W × D	3.3 × 3.3 × 15.0 in. (84.3 × 84.6 × 381 mm)
Weight	3.2 kg (7 lb)
Mechanical - Shelf	
Dimension H × W × D	89 × 442 × 446.9 mm (3.5 × 17.4 × 17.6 in.)
Weight	7.4 kg (16.3 lb)
Modules per Shelf:	Up to five modules
Mounting	<ul style="list-style-type: none"> <li>Flush mount</li> <li>6-inch offset center mount</li> </ul>
CAN Communication	RJ12 offset
Environmental	
Temperature	Operating: -40 to 75 °C (-40 to 176 °F); full rated output up to 65 °C (131 °F); >3,000 W at 75 °C (149 °F)
	Storage: -40 to 85 °C (-40 to 185 °F)
Relative Humidity	5 to 95% non-condensing
Elevation	Up to 3,000 m (9,842 ft)
Agency Compliance	
Safety	<ul style="list-style-type: none"> <li>ATIS (Pending)</li> <li>IEC/EN/CSA 62368-1 (Pending)</li> <li>CE Mark (Pending)</li> <li>UKCA Mark (Pending)</li> </ul>
	<b>Emissions:</b> <ul style="list-style-type: none"> <li>ETSI 300 386 (Pending)</li> <li>CFR47 (FCC) Part 15 Class A (Pending)</li> <li>ICES-003 Class A (Pending)</li> </ul>
EMC	<b>Immunity:</b> <ul style="list-style-type: none"> <li>ETSI 300 386 (Pending)</li> <li>EN 61000-4-2, 4-3, 4-4, 4-5, 4-6 (Pending)</li> <li>ANSI/IEEE C62.41 CatB3 (Pending)</li> </ul>



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