



moduflex⁺

12kW DC Power Core

PRODUCT DESCRIPTION

The Moduflex+ series is designed using Enetek's high efficiency switchmode rectifier modules and intelligent controller that incorporates with the respective load and battery distribution, incoming AC as well as surge protection. The solution can be customized according to the specific requirements.

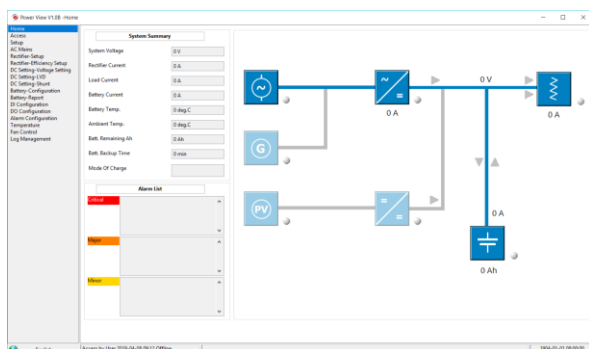
The SMU01 controller with user-friendly design, coupled with its compact size, simple-to-operate interface is highly adaptable and provides the monitoring capabilities for managing and optimizing the system solution.

APPLICATIONS

- Macro cell BTS
- Microwave
- LTE / WiMax
- FTTX
- Broadband Access
- Optical Fibre Transmission System
- IDC (Internet Data Centres)

KEY FEATURES

- Hot-Swap Rectifier Modules
- Modular, Scalable Cabinet Design
- High Power Density
- Highly Efficient @ >96%
- Front-to-back Airflow
- Excellent EMC Performance
- Wide Input Voltage Range
- Wide Temperature Range
- Compliant with Global Standards



TECHNICAL SPECIFICATIONS

PART NUMBER		SPC20405.1XX
Capacity Range		12kW
INPUT SPECIFICATIONS		
Mains Input Configuration		1-Phase 230Vac
		3-Phase 230Vac (Δ)
		3-Phase 400Vac+N (Y)
Power Factor		≥ 0.99
Frequency		45Hz to 66Hz
THD		$< 5\%$ (50% to 100% load)
Input Protections		Soft Start
		Surge Protection
		Overvoltage Protection
OUTPUT SPECIFICATIONS		
Nominal Output Voltage		48.0Vdc
Output Power		12kW
Efficiency		$>96\%$
BATTERY DISTRIBUTION		
Battery Low Voltage Disconnect		BLVD @ 200A
Battery Distribution		4 x 27mm width 80A-125A 1P MCB (Configurable)
LOAD DISTRIBUTION		
Load Low Voltage Disconnect		LLVD is optional
Load Distribution		12 x 18mm width 6A-63A 1P MCB (Configurable)
CONTROLLER and RECTIFIER TYPE		
Rectifier Module		ETR ⁺ 2048/3048 range of rectifier modules
Controller Module		SMU01 (refer to datasheet)
ENVIRONMENTAL		
Operating Temperature Range		-20°C to +75°C (de-rates above 55°C)
Storage Temperature Range		-40°C to +85°C
Relative Humidity		Operating: 5% to 95% RH non-condensing
		Storage: 0% to 99% RH non-condensing
Acoustic Noise		≤ 58 dB @ full load, 40°C
PHYSICAL		
Dimensions WxDxH (mm)		482 x 390 x 222 (5U)
Net Weight		~15kg (excluding rectifier modules)
DESIGN STANDARDS		
Electrical Safety		EN/IEC62368-1
EMC		ETSI EN 300 386 V2.1.1, EN61000-6-1/-2/-3/-4