



## Moduflex<sup>+</sup> 3kW DC Power Core

### PRODUCT DESCRIPTION

The Moduflex+ 24Vdc 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.

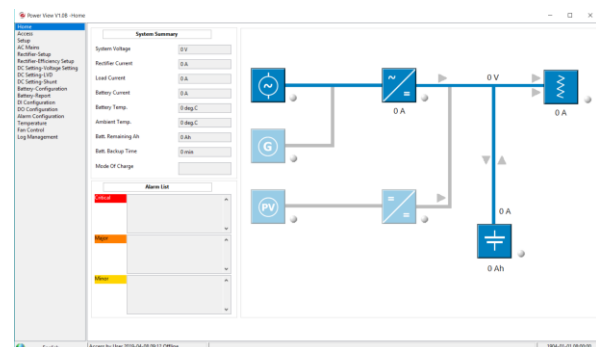
The SMU01 controller with user-friendly design, coupled with its compact size, simple-to-operate interface is highly adaptable and provides the monitoring capabilities for managing and optimizing the system solution.

### KEY FEATURES

- **Hot-Swap Rectifier Modules**  
Rectifier modules are hot-swappable and hot-pluggable
- **Modular, Scalable Cabinet Design**  
Flexible installations and capable of parallel cabinets for additional power/distribution
- **High Power Density**  
Reduces footprint
- **Highly Efficient @ up to 95%**  
Reduces losses and lowers operating costs
- **Front-to-back Airflow**  
Unobstructed scalability of shelves
- **Excellent EMC Performance**  
Lower interference and excellent susceptibility
- **Wide Input Voltage Range**  
Continued operation in demanding grid conditions
- **Wide Temperature Range**  
Applications in harsh climatic conditions
- **Compliant with Global Standards**

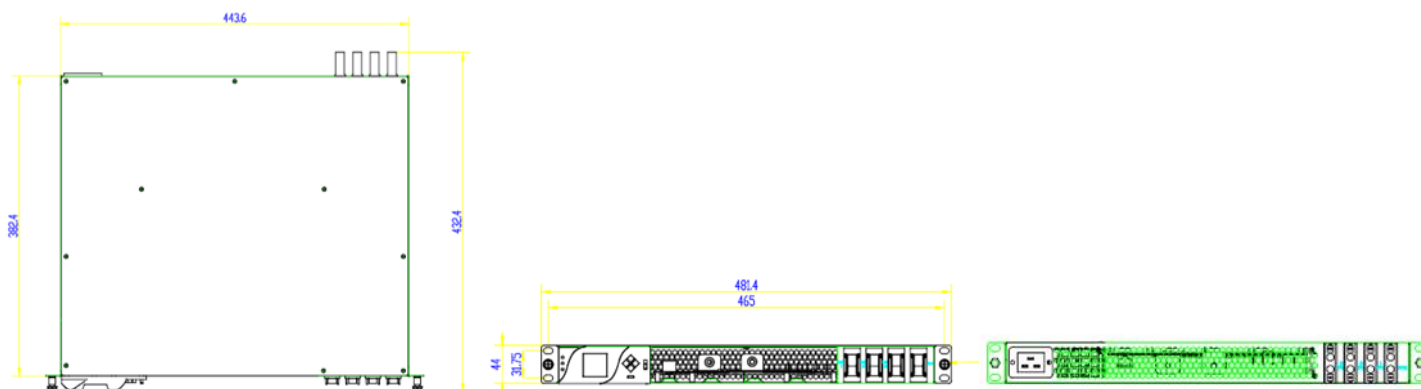
### APPLICATIONS

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



## TECHNICAL SPECIFICATIONS

|                                      |                                                  |
|--------------------------------------|--------------------------------------------------|
| <b>PART NUMBER</b>                   | <b>SPC40201.1XX</b>                              |
| Capacity Range                       | 3kW                                              |
| <b>INPUT SPECIFICATIONS</b>          |                                                  |
| Mains Input Configuration            | 1-Phase Nominal @ 230Vac (85Vac to 305Vac)       |
| Power Factor                         | $\geq 0.99$                                      |
| Frequency                            | 45Hz to 66Hz                                     |
| THD                                  | $< 5\%$ (50% to 100% load)                       |
| Input Protections (Module Level)     | Soft Start                                       |
|                                      | Surge Protection                                 |
|                                      | Overvoltage Protection                           |
| <b>OUTPUT SPECIFICATIONS</b>         |                                                  |
| Nominal Output Voltage               | 24.0Vdc                                          |
| Output Power                         | 3kW                                              |
| Efficiency                           | Up to 95%                                        |
| <b>BATTERY DISTRIBUTION</b>          |                                                  |
| Battery Low Voltage Disconnect       | BLVD @ 100A                                      |
| Battery Distribution                 | 1 x 30A 1P MCB                                   |
| <b>LOAD DISTRIBUTION</b>             |                                                  |
| Load Distribution                    | 3 x 16A 1P MCB                                   |
| <b>CONTROLLER and RECTIFIER TYPE</b> |                                                  |
| Rectifier Module                     | ETR <sup>+</sup> 1524 range of rectifier modules |
| Controller Module                    | SMU01 (refer to datasheet)                       |
| <b>ENVIRONMENTAL</b>                 |                                                  |
| 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 90% RH non-condensing           |
|                                      | Storage: 0% to 99% RH non-condensing             |
| Acoustic Noise                       | $\leq 58\text{dB}$ @ full load, 25°C             |
| <b>PHYSICAL</b>                      |                                                  |
| Dimensions WxDxH (mm)                | 482 x 433 x 44 (1U)                              |
| Net Weight                           | ~5kg (excluding rectifier modules)               |
| <b>DESIGN STANDARDS</b>              |                                                  |
| Electrical Safety                    | EN/IEC62368-1                                    |
| EMC                                  | ETSI EN 300 386 V1.6.1                           |



Due to continuous product development, specifications are subject to change without prior notice

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