#### **KEY FEATURES**

- TSEC Approved
- High Efficiency, above 96% reduces power consumption for lower operating costs.
- Modular Design: Simple to install and operate.
- Single Man Machine interface. Windows for system setting
- Wide Input voltage (85-300 V ac) and Temp Range (-40°C to 75°C)
- Compliant with global standards - delivers quality, performance and reliability, no matter what the application or location demands.
- Multiple communication ports such as Ethernet port, Potential free Contacts, GPRS Modem (optional) etc for flexible networking to achieve remote monitoring

In addition to reducing power consumption and lowering operating cost PE NetSure™702 Series with Integrated Smart Hybrid Microprocessor based controller offer superior perfomance and uncompromised reliability.

#### Description

The PE NetSure™702 Power System with hot pluggable R48-4000e Rectifiers allows for easy installation and reduce MTTR. System provides load power, Battery float current, and battery Recharge current. R48-4000e rectifiers are Monitored and controlled by Smart Hybrid microprocessor based Controller. The Modular Design of Rectifiers facilitates power plant sizing to application needs



For Outdoor Applications



For Indoor Applications

#### **APPLICATIONS**

- BTS Sites
- Access Network stations
- Rural Telecom Network
- Transmission Relay Station



R48-4000e





# Technical Specification

### SYSTEM CONFIGURATION

| System Capacity      | 48V @ 450 Amps                       |  |
|----------------------|--------------------------------------|--|
| Controller           | M530B                                |  |
| Rectifier            | Max 9 x 4000W                        |  |
| IP                   | IP 20 for Indoor / IP 55 for Outdoor |  |
| Sensor               | Temperature                          |  |
| Lightning Protection | Class C                              |  |
| Altitude             | 2000m, 6560 ft. at full power        |  |
| Operating Temp Range | -40°C to +75°C / -40°F to +167°F     |  |
| Relative Humidity    | 0 to 95%                             |  |

## **AC INPUT**

| Nominal Voltage    | 100V-250V IP |
|--------------------|--------------|
| Voltage Range (AC) | 85V – 300V   |
| Power Factor       | >99%         |
| Frequency Range    | 45Hz – 65Hz  |

### DC OUTPUT

| Nominal Output V | -48V         |
|------------------|--------------|
| Output Voltage   | -42V to -58V |
| Output Current   | Max 450A DC  |

### DISTRIBUTION

| AC Input                  | 63A / 4P X 1      |
|---------------------------|-------------------|
| RM Input Protection       | 32A /1P X 9       |
| <b>Battery Protection</b> | 400A HRC Fuse X 3 |
| DC Distribution           | 630A HRC Fuse X 1 |





# Technical Specification

### RECTIFIER

| Configuration               | Model              |
|-----------------------------|--------------------|
| Efficient Module            | R48-4000e          |
| <b>Electrical Parameter</b> | Description        |
| Input Voltage               | 85V AC – 300V AC   |
| Power Factor                | ≥ 0.99             |
| Efficiency                  | 95.3% peak         |
| Max Input Current           | 23.5A              |
| Nominal Out Voltage         | -53.5V DC          |
| Output Voltage              | -42V DC to -58V DC |

| CONTROLLER                 | M530B  |  |
|----------------------------|--|--|
| Display                    | 128 x 160 pixels TFT LCD   |  |
| Communication              | RS 485, RS 232, 10/100Mbps Ethernet, IPV4 & IPV6, CAN                            |  |
| Protocol                   | HTTP, SNMP, YDN23  |  |
| Input Analog               | 3 battery currents, 4 load current, DC bus/ battery voltage, 2 temperatures      |  |
| Input Digital              | 20 load Fuses, 4 battery Fuses, 1 SPD alarm                                      |  |
| Outputs                    | 2 LVD mono or bi stable contactors, 8 user relay outputs, 2 PWM output, 1 buzzer |  |
| Energy Measurement         | Inbuilt 4 channel DCEM   |  |
| Solar Hybrid Functionality | Compatible for 2kW & 3kW MPPT, Interfacing capability with 12MPPTs               |  |
| Li-ion battery             | Li-ion battery monitoring & control combo interface                              |  |
| Compatibility              |  |  |

## **MECHANICAL PARAMETER**

|   | System Indoor (W X D X H) in mm          | 586 X 490 X 982 (mm)  |
|---|--|-----------------------|
| Dimension                               | System Outdoor (W X D X H) in mm         | 600 X 600 X 1050 (mm) |
| C-9000000000000000000000000000000000000 | Rectifier Module (W X D X H) in mm       | 85.3 X 293 X 132 (mm) |
| Weight                                  | Aprox 125 Kg including Rectifier Modules |                       |

