

NetSure™ Inverter Series

Converged AC and DC Power System



Benefits

- Free up floor space by powering AC and DC loads in a single subrack with a common battery bank
- Minimize energy consumption with up to 98% rectifier power efficiency* and 96.3% inverter efficiency in normal AC-AC mode
- Maximize site availability thanks to zero transfer time from grid to battery
- Seamlessly manage your complete back-up solution locally or remotely through a single interface

System Elements

1. AC & DC Distribution Panel
2. NetSure™ Control Unit
3. eSure™ Inverters, I230-1200
4. eSure™ Rectifiers, R48-2000E3

*Using NetSure 7100 systems with R48-3500E4 rectifiers paired with the stand-alone NetSure Inverter 19" cassette.

The converged NetSure™ Inverter Series powers AC and DC loads in a single subrack with a common battery bank, freeing up floor space while minimizing energy loss and lowering energy consumption.

Improve reliability and save space

The converged NetSure Inverter AC and DC power system delivers outstanding reliability, modularity and scalability. With market leading power module density, a single system houses both AC and DC power in a compact footprint. Rectifiers and inverters can be fed from the same battery bank, saving additional space and financial investment.

Converged NetSure inverter systems deliver superior reliability and enable hours of battery backup when required. Systems include 1.2kW AC inverters and 2kW rectifiers with up to 14.4kW AC and 24kW DC power in a single system.

To accommodate AC backup needs at existing sites, an easy-to-install 1U high front access NetSure inverter add-on shelf is available that delivers up to 7.2kW.

Minimize energy loss

Converged NetSure inverter systems are designed for efficient operation at any load condition. High-efficiency eSure™ rectifiers are available up to >98% efficiency.* The I230-1200 VAC eSure™ inverter operates up to a market-leading 96.3% efficiency. Powering your AC and DC loads with eSure technology ensures energy loss is kept to a minimum and your network is supported by an extremely reliable backup system.



NetSure™ Inverter System
19", 12 kW DC / 5 kVA AC

Technical Specifications

| Part Number | 02405672 BMK1115601-002 | 02405671 BMK1115601-001 | 02405674 BMK1115601-004 | 02405673 BMK1115601-003 | 02405676 BMK1115601-006 | 02405677 BMK1125608-001 |
|------------------------------------|---|---|--|--|---------------------------------------|--|
| Description | 23", 24 kW DC/15 kVA | 23", 12 kW DC/7.5 kVA | 19", 20 kW DC/12.5 kVA | 19", 10 kW DC/6.25 kVA | 19", 12 kW DC/5 kVA | 19" cassette, 3.75 kVA |
| AC Input – Rectifiers | | | | | | |
| Range | Single phase: 85 VAC to 300 VAC (Nominal: 200 VAC to 240 VAC) | | | | | - |
| Line Frequency | 50 Hz / 60 Hz (45 Hz to 65 Hz) | | | | | - |
| Connections | Terminal and input mains circuit breaker | | | | | - |
| Surge Protection | Included | | | | | - |
| AC and DC Input – Inverters | | | | | | |
| Range | Single phase: 185 VAC to 275 VAC (Nominal: 200 VAC to 240 VAC) DC supply: 40 VDC to 58.5 VDC (Nominal: 48 VDC) | | | | | - |
| Line Frequency | 50 Hz / 60 Hz (47 Hz to 53 Hz / 57 Hz to 63 Hz) | | | | | - |
| Connections | Terminal and input mains circuit breaker | | | | | - |
| Surge Protection | Included | | | | | - |
| DC Output | | | | | | |
| Adjustable Range | -42 VDC to -58 VDC (Nominal: -48 VDC) | | | | | - |
| Power, Maximum | 24 kW (12 x 2 kW) | 12 kW (6 x 2 kW) | 20 kW (10 x 2 kW) | 10 kW (5 x 2 kW) | 12 kW (6 x 2 kW) | - |
| Load, Maximum | 22 kW | 10 kW | 18 kW | 8 kW | 10 kW | - |
| Efficiency, Peak | 96.3% | | | | | - |
| DC System Units | | | | | | |
| Distribution (18 mm MCBs) | Up to 9 x 1P (3-63 A) | Up to 13 x 1P (3-63 A) | Up to 6 x 1P (3-63 A) | | Up to 4 x 1P (3-63 A) | - |
| MCBs (default configuration) | 13 x 32 A | | 6 x 32 A | | 2 x 32 A + 2 x 63 A | - |
| Priority load management | Yes | Yes | - | - | - | - |
| Battery Connections | 3 x 200 A circuit breakers | | | 2 x 200 A circuit breakers | | - |
| AC Output | | | | | | |
| Range | Single phase: 200 VAC to 240 VAC (Nominal: 230 VAC) | | | | | - |
| Line Frequency | 50 / 60 Hz (50 Hz to 60 Hz) | | | | | - |
| Power, Maximum | 15 kVA/14.4 kW (12 x 1.25 kVA/1.2 kW) | 7.5 kVA/7.2 kW (6 x 1.25 kVA/1.2 kW) | 12.5 kVA/12 kW (10 x 1.25 kVA/1.2 kW) | 6.25 kVA/6 kW (5 x 1.25 kVA/1.2 kW) | 5 kVA/4.8 kW (4 x 1.25 kVA/1.2 kW) | 3.75 kVA/3.6 kW (3 x 1.25 kVA/1.2 kW) |
| Load, Maximum | 13.75 kVA/13.2 kW | 6.25 kVA/6.0 kW | 11.25 kVA/10.8 kW | 5.0 kVA/4.8 kW | 3.75 kVA/3.6 kW | 2.5 kVA/2.4 kW |
| Efficiency, Peak | 96.3% (AC mode); 93.5% (DC mode) | | | | | - |
| AC System Units | | | | | | |
| Distribution (18 mm MCBs) | Up to 9 x 1P (3-20 A recommended) | Up to 9 x 1P (3-10 A recommended) | Up to 7 x 1P (3-20 A recommended) | Up to 7 x 1P (3-10 A recommended) | Up to 3 x 1P (3-10 A recommended) | 1 x 1P 15 A circuit breaker (1U) |
| MCBs (default configuration) | 9 x 10 A | 9 x 6 A | 7 x 10 A | 7 x 6 A | 1 x 10 + 2 x 6 A | 1 x 1P 15 A circuit breaker |
| Service outlet | 6 A DIN socket and 30 mA residual current device | | - | - | - | - |
| Transfer Performance | 0s from grid to battery | | | | | - |
| DC Current Consumed | Max 27 A per inverter module (at 48 VDC) | | | | | - |
| Manual Bypass | Standard | Standard | Standard | Standard | NA | NA |
| Physical Characteristics | | | | | | |
| Dimensions (H x W x D) | 554.1 x 583.6 x 367.0 mm | 465.0 x 583.6 x 367.0 mm | 554.1 x 482.5 x 367.0 mm | 465.0 x 482.5 x 367.0 mm | 289.0 x 482.5 x 367.0 mm | 44.1 x 482.5 x 367.0 mm |
| Weight (excluding modules) | 45 kg | 42 kg | 39 kg | 36 kg | 20 kg | 4 kg |
| Access and Security | Front access, IP20 | | | | | - |
| Environmental | | | | | | |
| Temperature Range, Operating | -5 °C to +65 °C (full power up to +45 °C) | | | | | - |
| Relative Humidity, Operating | <95% | | | | | - |
| Altitude | 3000 m, 10000 ft. (2000 m, 6562 ft. at full power) | | | | | - |
| Standards Compliance | | | | | | |
| Electrical | EN 62368-1:2014/A11:2017, EN 62040-1:2008+A1:2013 | | | | | - |
| EMC | ETSI EN 300 386 V2.1.1 (Conducted class A, Radiated class B) | | | | | - |
| Environmental | REACH, RoHS 6 | | | | | - |