

NETSURE™ POWER SYSTEMS FOR AC AND DC APPLICATIONS



NetSure™ power systems equipped with NOVA or MEDIA inverters offer efficient and reliable backup energy for AC and DC applications.

KEY FEATURES

- Compact system for AC & DC loads
- Fully ready for installation & commissioning
- Easily expandable with additional rectifiers and inverters
- Only one alarm interface for AC & DC supervision
- Can be configured with NetSure 501 or NetSure 701 DC power systems
- NetSure 501 and 701 DC power systems are available with eSure rectifiers that approach 97% efficiency
- Available with NOVA or MEDIA TSI inverters
- Eliminates the need for an external static-switch, providing seamless modularity.

Description

Thanks to the compact system architecture, one cabinet can house both inverter and rectifier modules, AC and DC distribution units, and batteries in some configurations.

These factory pre-designed units and shelves can be quickly, easily and cost effectively reconfigured as needed. In the top-cabled NetSure™ 501 or NetSure 701 single cabinet configuration, an inverter subrack is simply installed in the remaining space.

Compact and scalable NOVA and MEDIA inverters with Twin Sine Inverter (TSI) technology provide a pure supply of AC power. In conjunction with a NetSure™ DC power system, these inverters deliver a reliable backup energy solution for AC applications.

These inverters are designed to work from 230Vac and 48Vdc sources through AC/AC and DC/AC conversions. Unlike traditional inverters, the NOVA and MEDIA feature an AC to AC conversion process, known as “Enhanced Power Conversion (EPC), that double filters the output wave form. EPC mode operates offline, assuring high efficiency without any compromise in quality or stability.

NetSure DC power systems configured with NOVA or MEDIA inverters and eSure™ rectifiers provide the most efficient combined AC and DC system on the market today, with up to 95% system efficiency.

Application

Our NetSure Power systems for AC and DC applications are designed for telecom and datacom sites, or anywhere efficient and highly reliable backup power is needed.

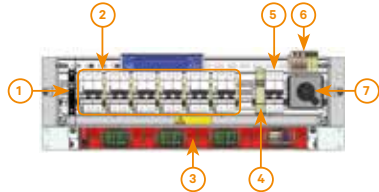


NetSure 701 with MEDIA inverters

System Components

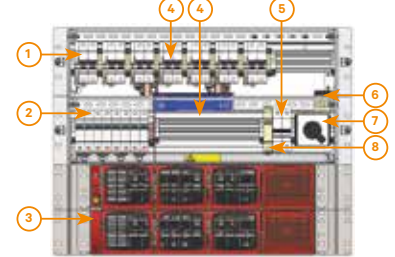
3 kVA Configuration

1. DC input breaker
2. AC output breakers
3. NOVA inverters
4. Surge arrestors
5. AC input breaker
6. AC input terminals
7. Manual bypass.



12 kVA Configuration

1. Optional 3U AC DU
2. DC input breakers
3. MEDIA inverters
4. AC output breakers
5. AC input breaker
6. AC input terminals
7. Manual bypass
8. Surge arrestors.



Technical Specifications

General

EMC	ENC 55 022, class B with NOVA, class A with MEDIA
Safety	IEC 60950, EN 60950-1
RoHS	Compliant
Cabinet	IP20

AC Input to Rectifiers

Terminals	Dedicated input on terminals
Connections	Single or three phase connections possible
Input Voltage, Nominal	200 to 250 Vac
Max Input Current	13A for R48-2000 and R48-2000e 20A for R48-3200 and 21,5A for R48-3500e
Frequency	45-65Hz

AC Input to Inverters

Terminals	Dedicated input on terminals
Input Voltage, Nominal	230 Vac single phase 185 to 265 Vac
Voltage Range	3A/ NOVA inverter
Input Current (at 185Vac)	7A/ MEDIA inverter
Frequency (selectable)	50-60Hz
Internal Protections	2-pole circuit breaker and surge arrestor

AC Output

Nominal Voltage	230 Vac single phase
Voltage Range	200 to 240 Vac
Frequency	50-60Hz
Nominal Output Power	750VA (525W on resistive load)/NOVA inverter 1500VA (1200W on resistive load)/ MEDIA inverter
Max AC Output Power (NetSure™ 501 or 701)	750VA up to 3kVA with NOVA inverter 1,5kVA up to 6 or 12kVA with MEDIA inverter
Protection	Breakers, RDC

Transfer Performance

Maximum Voltage Interruption	0 mS
Total Transient Voltage Duration	0 mS
Manual Bypass	Standard

DC Output

Output Voltage Range	42 to 58 Vdc
Nominal Output Voltage	48Vdc
Nominal Output Current	250A – NetSure 501 (1 rectifier shelf) 500A – NetSure 501 (2 rectifier shelves) 440A – NetSure 701 (1 rectifier shelf) 725A – NetSure 701 (2 rectifier shelves)
Protection	Breakers

DC Current Consumed by Inverters*

NetSure 501	500A max battery current = DC load current + DC inverter current
NetSure 701	800A max battery current = DC load current + DC inverter current
Current (at 40 Vdc)	14A per NOVA inverter 34A per MEDIA inverter
Internal Protection	1 x 63A circuit breaker for NOVA shelf 4 x 50A circuit breaker per MEDIA shelf

* A calculation of the amount of current the inverters consume during battery backup.

Environment

Altitude Above Sea	<1500m
Ambient Temperature	-5°C to +40°C
Storage Temperature	-40°C to 70°C
Relative Humidity	95%, non-condensing

Dimensions (H x W x D)

NetSure 501 Cabinet	1600/1800/2000 x 600 x 600 mm
NetSure 701 Cabinet	1800 x 600 x 600 mm

Optional Units for Inverters

Display and TCP/IP interface, 2 poles distribution breakers, alarm contacts, extra 3U AC distribution unit

Ordering Information

Part Number	Description
BMK445080/xxx	NetSure 501 for AC and DC applications
BMK447080/xxx	NetSure 701 for AC and DC applications

For further details on rectifiers and inverters, please see the respective data sheet.