Vertiv™ NetSure™ Inverter System

Stand-Alone AC Power System

Benefits

- Leverage existing DC power infrastructure with easy to add subrack.
- Minimize energy consumption with 95.2% peak efficiency in normal AC-AC mode.
- Maximize site availability thanks to zero transfer time from grid to battery.
- Manage the inverter system locally or remotely through the NetSure™ Control Unit (NCU).

Service

- Get the job done right by leveraging a professional team.
- Rest assured your inverter system is installed properly and configured optimally.
- Reduce risk of long-term damage and protect your warranty.
- Ensure system settings are optimized and meet your standards.

The stand-alone Vertiv™ NetSure™ Inverter System allows you to support AC loads from existing DC power systems and batteries.

Improve reliability and save space

The stand-alone Vertiv™ NetSure™ Inverter system delivers outstanding reliability, modularity and scalability. With market leading inverter module density, the system supports your AC loads in a compact footprint. Rectifiers and inverters are connected to the same battery bank which not only facilitates zero second transfer time should commercial AC fail, but also saves space and reduces financial investment.

Grow as you go

System sizes range from 5 kVA to 24 kVA and accommodate modular 1 kVA/1 kW AC inverters that allow you to add inverters as your loads increase. They are available in 19" wide with bulk outputs or 23" wide with NEMA outlets. NetSure inverter systems can be used in conjunction with any brand or vintage of DC power system that has sufficient capacity to support the additional inverter load.

While primarily designed for field installation with an existing DC power system, these systems can also be ordered from the factory mounted in a variety of relay racks with no cabling.

Minimize energy loss

The Vertiv™ NetSure™ Inverter Series is designed for efficient operation at any load condition. All models are supported by high-efficiency Vertiv™ eSure™ inverters that deliver up to 95.2% efficiency across a wide operating range. Powering your AC loads with eSure technology helps keep energy loss to a minimum and ensures your network is supported by an extremely reliable backup system.

Technical Specifications

	5 kVA Bulk Output	6 kVA Bulk Output	10 kVA Bulk Output	12 kVA Bulk Output	15 kVA Bulk Output	20 kVA Bulk Output
	584130100 List 01	584130100 List 01E	584130100 List 03	584130100 List 03E	584130100 List 05	584130100 List 05E
AC Input						
Voltage, Nominal	100 VAC to 125 VAC	100 VAC to 125 VAC	100 VAC to 125 VAC	100 VAC to 125 VAC	-	-
Voltage Range	96 VAC to 140 VAC	96 VAC to 140 VAC	96 VAC to 140 VAC	96 VAC to 140 VAC	-	-
Single or Three-Phase	Single Phase	Single Phase	Single Phase	Single Phase	-	-
Frequency	50 Hz or 60 Hz	50 Hz or 60 Hz	50 Hz or 60 Hz	50 Hz or 60 Hz	-	-
Maximum Current	60 A	72A	120 A	144 A	-	-
Power Factor	>0.99 @ 100% linear load	>0.99 @ 100% linear load	>0.99 @ 100% linear load	>0.99 @ 100% linear load	-	-
Total Harmonic Distortion	< 5% @ 100% linear load	< 5% @ 100% linear load	< 5% @ 100% linear load	< 5% @ 100% linear load	-	-
DC Input						
Voltage, Nominal	40 to 58.5 VDC, 48 VDC (nominal)					
Voltage Range	50 VDC to 58.5 VDC					
Maximum Current	115 A	138 A	230 A	276 A	345 A	460 A
AC Input						
Voltage, Nominal	120 VAC					
Frequency	50 Hz or 60 Hz					
Maximum Power	5 kVA/ 5kW	6 kVA/6 kW	10 kVA/10 kW	12 kVA/12 kW	15 kVA/15 kW	20 kVA/20 kW
Maximum Current	42 A	50.4 A	84.5 A	100.8 A	126 A	168 A
Peak Efficiency	95.2% AC/AC, 92% DC/AC					
Temperature Performance	Full power up to +45 °C (+113 °F) at input voltage range of 100 VAC - 125 VAC					
Over Capacity (fault clearing)	105%-125% @40-48V (15 s), 125%-200% (1 s), >200% (120 ms)					
Load Outputs	Bulk Output(s)					
AC Load Distribution						
Circuit Breaker Type	Rocker Switch					
Circuit Breakers	1	1	2	2	4	4
Circuit Breaker Rating	70 A					
Monitoring						
Module Name	M830B					
Local Display	128 x 160 Pixels TFT LCD					
Communication	RS232, RS485, Ethernet, USB (for software upgrades)					
Protocols	IPv4, IPv6, HTTPS, RADIUS User Authentication, SNMPv2, SNMPv3, EEM, SocTpe, Rsoc, Modbus					
Analog Inputs	2 battery currents, 1 load current, 1 bus voltage, 2 battery voltages, 2 temperatures, fuel level sensor and much more with additional interface boards					
Digital Inputs	1 input for status of surge protective device auxiliary contacts, 12 load fuses, 6 battery fuses, bi-stable contactor status					
Outputs	3 LVDs, (2) bi-stable and (1) mono-stable					
Security	HTTPS, SNMPv3 encryption and RADIUS User Authentication					
IB2 Interface Board	8 relay outputs, 8 digital inputs, 2 temperatures					
IB4 Interface Board	Additional Ethernet port					
SMTEMP Board	Optional temperature concentrator with up to 8 temperature sensors					
Environmental						
Operating Temperature	-20°C to +65°C/-4˚F to +149˚F (full power up to +45°C/113˚F)					
Storage Temperature	-40°C to 70°C / -40°F to +158°F					
Relative Humidity	<95%					
Altitude	3000 m, 10000 ft. (2000 m, 6562 ft. at full power)					
Physical Characteristics						
Color	Grey					
Height	3.5" /88.9 mm	5.25"/133.4 mm	7"/177.8 mm	8.75"/222.3 mm	12.25"/311.2 mm	14"/355.6 mm
Width	17.5"/444.5 mm	17.5"/444.5 mm	17.5"/444.5 mm	17.5"/444.5 mm	17.5"/444.5 mm	17.5"/444.5 mm
Depth	16.6"/421.6 mm	16.6"/421.6 mm	16.6"/421.6 mm	17.4"/442.0 mm	17.4"/442.0 mm	17.4"/442.0 mm
Weight (Approximate)	21 lbs	32 lbs	32 lbs	54 lbs	53 lbs	63 lbs
Module Slots	5	10	10	15	15	20
Mounting Width	19"					
Access	Rear Cabling					
Standards Compliance						
Safety	UL 1778; CUL, CSA C22.2 NO.107.3					
EMC	IEC/EN 61000-4-2; IEC/EN 61000-4-5; GR-1089; FCC Part 15 (CFR47); Conducted Emission: Class A; Radiated Emission: Class B					
Ingress Protection	IP20					
1 kVA/1 kW Inverter Module						
Part Number	1I120-100					
Warranty						
Standard Warranty	1 Year Warranty					

	6 kVA Outlet Output	6 kVA Outlet Output	12 kVA Outlet Output	12 kVA Outlet Output	18 kVA Outlet Output	24 kVA Outlet Output
	584130100 List 02	**584130100 List 02E**	**584130100 List 04**	**584130100 List 04E**	**584130100 List 06**	**584130100 List 06E**
AC and DC Input						
Voltage, Nominal	100 VAC to 125 VAC					
Voltage Range	96 VAC to 140 VAC					
Single or Three-Phase	Single Phase					
Frequency	50 Hz or 60 Hz					
Maximum Current	72 A	72 A	144 A	144 A	216 A	288 A
Power Factor	>0.99 @ 100% linear load					
Total Harmonic Distortion	< 5% @ 100% linear load					
DC Input						
Voltage, Nominal	40 to 58.5 VDC, 48 VDC (nominal)					
Voltage Range	50 VDC to 58.5 VDC					
Maximum Current	138 A	138 A	276 A	276 A	414 A	552 A
AC Input						
Voltage, Nominal	120 VAC					
Frequency	50 Hz or 60 Hz					
Maximum Power	6 kVA/6 kW					
Maximum Current	50.4 A	50.4 A	100.8 A	100.8 A	151.2 A	199.2 A
Peak Efficiency	95.2% AC/AC, 92% DC/AC					
Temperature Performance	Full power up to +45 °C (+113 °F) at input voltage range of 100 VAC - 125 VAC					
Over Capacity (fault clearing)	105%-125% @40-48V (15 s), 125%-200% (1 s), >200% (120 ms)					
Load Outputs	NEMA Outlets					
AC Load Distribution						
Circuit Breaker Type	Toggle Switch					
Circuit Breakers	4	4	8	8	16	16
Circuit Breaker Rating	15 A					
Monitoring						
Module Name	M830B					
Local Display	128 x 160 Pixels TFT LCD					
Communication	RS232, RS485, Ethernet, USB (for software upgrades)					
Protocols	IPv4, IPv6, HTTPS, RADIUS User Authentication, SNMPv2, SNMPv3, EEM, SocTpe, Rsoc, Modbus					
Analog Inputs	2 battery currents, 1 load current, 1 bus voltage, 2 battery voltages, 2 temperatures, fuel level sensor and much more with additional interface boards					
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Width	21.1"/535.9 mm	21.1"/535.9 mm	21.1"/535.9 mm	21.1"/535.9 mm	21.1"/535.9 mm	21.1"/535.9 mm
Depth	16.6"/421.6 mm	16.6"/421.6 mm	16.6"/421.6 mm	18.0"/458.7 mm	18.0"/458.7 mm	18.0"/458.7 mm
Weight (Approximate)	24 lbs	37 lbs	37 lbs	61 lbs	61 lbs	73 lbs
Module Slots	6	12	12	18	18	24
Mounting Width	23"					
Access	Rear Cabling/Front Outlets					
Standards Compliance						
Safety	UL 1778; CUL, CSA C22.2 NO.107.3					
EMC	IEC/EN 61000-4-2; IEC/EN 61000-4-5; GR-1089; FCC Part 15 (CFR47); Conducted Emission: Class A; Radiated Emission: Class B					
Ingress Protection	IP20					
1 kVA/1 kW Inverter Module						
Part Number	1I120-100					
Warranty						
Standard Warranty	1 Year Warranty					

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