NIMBUS 10 RACK MOUNT INVERTERS

The NIMBUS 10 Family of rack mounted inverters provide 1000 VA of pure sine wave AC power from a DC source.

The pure sine wave output is produced by a DSP controlled power circuit, using high power PWM, which allows efficiency higher than 90%, and very low distortion, even with reactive loads. The inverter isolates the load from voltage swings and transients present in the AC utility, therefore increasing reliability and life of sensitive equipment.

The very low distortion power factor corrected pure sine wave offers clean and reliable AC power, which allows powering of sensitive and highly reactive loads. As well, the low EMI levels avoid interference to data/signal processing equipments like computers, navigational or control equipments.

The NIMBUS 10 Family of inverters has a built-in Bypass Static Transfer Switch, which allows connection of a utility or other AC power source which can be switched to the load automatically in the event of DC input failure.

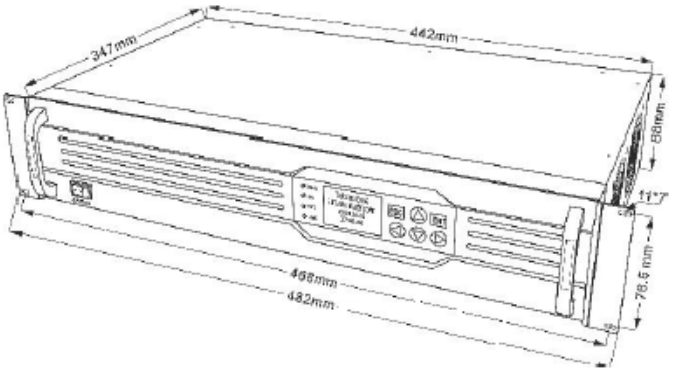
FEATURES

- 19” Rackmount Design
- Pure Sine Wave Output
- Power: 1000 VA / 800 watts
- RS485 Modbus Interface
- Optional SNMP Management (Ethernet TCP/IP)
- Temperature Controlled Cooling Fan
- Internal Bypass Function (STS)
- Configurable Input Priority for Bypass
- Protections: Output Overload, Output Short Circuit, Input Under Voltage, Input Over Voltage, Over Temperature, Input Reverse Polarity, AC Input Fuse, AC Output Fuse
- LED and LCD Display Control Panel for configuration, visual and audible alarms
- Multicolored LED for easy indication of power on (AC/DC), overload, DC and AC condition and fault, equipment fault, etc.
- LCD Digital display shows: Output Voltage and Current, Output Power, Load Factor, Output Frequency, Input Voltage, Input AC Frequency, Temperature, Alarms, Configuration and Network Settings.

AVAILABLE MODELS			
MODEL	OUTPUT POWER	INPUT VOLTAGE (VAC)	OUTPUT VOLTAGE RANGE (VDC)
NB10-121	1.0 KVA 800 W	100-120 VAC ADJUSTABLE	10 - 16
NB10-241			20 - 32
NB10-481			46 - 58
NB10-111			100 - 150

APPLICATIONS

- Computers, communications & control equipment, SCADA, test equipment, field instrumentation, factory automation systems, networking and telecomm equipment.
- Power Tools, drills, air compressors



OPERATION

The input voltage priority can be configured either AC normally on-line and DC Backup or DC normally on-line and AC Backup. In case the normally on-line input fails, the internal bypass will switch to the backup input

MIKOS TECHNOLOGY

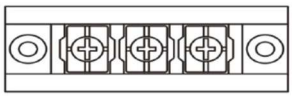
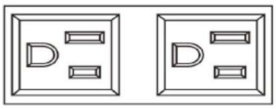
NIMBUS 10 RACK MOUNT INVERTERS
1.0 KVA, 120 VAC , Specifications

	MODEL			
	NB10-121	**NB10-241**	**NB10-481**	**NB10-111**
ELECTRICAL				
Continuous Output Power	800 W / 1.0 KVA			
Surge Rating	960 W @ 1 min 1200W @10 sec			
Input Voltage	10-16 VDC	20-32 VDC	46-58 VDC	100 – 150 VDC
Max Input Current	78.2 A	39.1 A	20.6 A	11.2 A
Efficiency (full load)	>=85%			
Output Voltage	100-120 VAC, Adjustable			
Ouput Voltage Regulation	± 1.5%			
Output Frequency	60Hz ± 0.1 Hz			
Power Factor	0.8			
Output Waveform	Pure Sine Wave			
THD	<3%			
Protections	Output Overload, Output Short Circuit, Input Under Voltage, Input Over Voltage, Over Temperature, Input Reverse Polarity, AC Input Fuse, AC Output Fuse			
Digital Display	Output Voltage, Output Current, Output Power, Load factor, Output Frequency, Input Voltage, Temperature, Alarms, Configuration, Network Settings			
LED Indicators	Multicolored LED and Buzzer: Startup Self Test, Power On, Operation Mode (AC/DC), AC Input Status, DC Input Status, Load Status, Overload, Input Fault, Equipment Fault			
Interface Control Port	RS-485 Modbus			
Alarm Relay	5 group, Dry Contacts, Form-C			
Remote Control	Optional			
SNMP Management (Optional)	10/100 Base-T Ethernet TCP/IP port			

INTERNAL BYPASS (STATIC TRANSFER SWITCH)	
AC Input Range	96 - 144 VAC
AC Input Frequency	60 Hz (47-63 Hz)
Transfer Time	<= 5 ms

PHYSICAL			
Operating Temperature	-20°C to +50°C		
Storage Temperature	-20°C to +60°C		
Cooling	Temperature Controlled Cooling Fan		
Dimensions	442 (L) × 347 (W) × 88 (H) mm		
Weight	13.5 Kg		
Rack Units	2 Rack Units		
Available AC Output Sockets (Add Designator to Model)	**Type** Terminal Strip 2 x North American NEMA 5-20	**Designator** -A -B	**Other Types Available Under Request**

COMPLIANCE	
Safety	EN60950-1, EN 61000-6-3; EN 61000-6-1 ;IEC 61000-6-2 and IEC 61000-6-4
EMC	FCC Class A, ANSI C63.4: 2003, CISPR 22: 2005

Drawing	Description	Recommended Max Power	Designator
	Terminal Strip	2 KVA, 3 KVA, 5 KVA	-A
	North American NEMA 5-20 (2 Outlets)	2 KVA	-B

- Please add Designator to model number
- Please contact us if a low current outlet socket (North American, GFCI, Schuko, Universal, etc.) is required on High Power inverters (3KVA, 5KVA)
- Please contact us for further information if GFCI is required
- Other types and configurations available, please contact us with your specific requirements

Additional Options

Option	Description
SNMP	SNMP Management module with 10/100 Base T interface
EXT-ALM	Extended set of five dry contacts for signalling 5 alarm conditions