

STRATOS RACK MOUNT INVERTERS



The **STRATOS** Family of rack mounted inverters provide 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 **STRATOS** Family of inverters has a standard built-in 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
- Advanced Microprocessor Design (DSP)
- Powers Reactive Loads
- Power Factor: 1
- RS232C Interface With Selectable Baud Rate
- Optional SNMP Management
- Temperature Controlled Cooling Fan
- Wide -30°C To +60°C Operating Temperature
- Programmable Output Voltage And Frequency
- Bypass Function (Static Transfer Switch -STS)
- Optional low power sleep mode
- Protections: Output Overload, Output Short Circuit, Input Under Voltage, Input Over Voltage, Over Temperature, Input Reverse Polarity (Fuse)
- LED Digital display shows: Output Voltage and Current, Output Power, Output Frequency, Input Voltage, Temperature and Alarms

APPLICATIONS

- Computers, communications & control equipment, SCADA, test equipment, field instrumentation, factory automation systems, networking and telecomm equipment.
- Power Tools, drills, air compressors
- Lamps, fluorescent lights, vacuum cleaners, microwave ovens, refrigerators
- Televisions, home theaters, game consoles, satellite equipment

OPERATION

STRATOS inverters operate normally on-line, supplying clean, pure sine wave AC voltage to the load. In case the DC input fails, the STS will transfer the AC input to the AC output.

AVAILABLE MODELS

MODEL	OUTPUT POWER	OUTPUT VOLTAGE (VAC)	INPUT VOLTAGE RANGE (VDC)
ST-2121	2 KVA 2000 W	Selectable: 100, 110, 115, 120	10 - 16
ST-2241			20 - 32
ST-2481			42 - 62
ST-2111			90 - 140
ST-2221			180 - 275
ST-2122		Selectable: 200, 220, 230, 240	10 - 16
ST-2242			20 - 32
ST-2482			42 - 62
ST-2112			90 - 140
ST-2222			180 - 275
ST-3121	3 KVA 3000 W	Selectable: 100, 110, 115, 120	10 - 16
ST-3241			20 - 32
ST-3481			42 - 62
ST-3111			90 - 140
ST-3221			180 - 275
ST-3122		Selectable: 200, 220, 230, 240	10 - 16
ST-3242			20 - 32
ST-3482			42 - 62
ST-3112			90 - 140
ST-3222			180 - 275
ST-5241	5 KVA 5000 W	Selectable: 100, 110, 115, 120	20 - 32
ST-5481			42 - 62
ST-5111			90 - 140
ST-5221			180 - 275
ST-5242			Selectable: 200, 220, 230, 240
ST-5482		42 - 62	
ST-5112		90 - 140	
ST-5222		180 - 275	

MODEL				
ST-2121	ST-2241	ST-2481	ST-2111	ST-2221

ELECTRICAL

Continuous Output Power	2000 W / 2KVA				
Surge Rating	2300 W for 3 minutes 2500 W for 3 seconds				
Peak Power	4000 W				
Input Voltage	10-16 VDC	20-32 VDC	42-62 VDC	90-140 VDC	180-275 VDC
Input Current (No Load)	1.25 A	0.56 A	0.32 A	0.38 A	0.18 A
Efficiency (full load)	86%	88%	89%	94%	94%
Output Voltage	100, 110, 115, 120 VAC (Switch Selectable)				
Output Voltage Regulation	± 3.0%				
Output Frequency	50/60Hz ± 0.05% (Switch Selectable)				
Peak Output Current	35A				
Power Factor	1.0				
Output Waveform	Pure Sine Wave				
THD	<3%, Reactive Load				
Protections	Output Overload, Output Short Circuit, Input Under Voltage, Input Over Voltage, Over Temperature, Input Reverse Polarity (Fuse) , AC Input Breaker				
Digital Display	Output Voltage, Output Current, Output Power, Output Frequency, Input Voltage, Temperature, Alarms				
Interface Control Port	RS-232C , Switch Selectable Baud Rate: 2400, 4800, 9600, 19200				
Alarm Relay	Dry Contacts, Form-C				
Remote Control	Optional				
SNMP Management	Optional				

BYPASS (STATIC TRANSFER SWITCH)

AC Input Range	90 - 130 VAC
AC Input Frequency	50 – 60 Hz ± 3 Hz
Transfer Time	4 – 6 ms

PHYSICAL

Operating Temperature	-30°C to +60°C		
Storage Temperature	-30°C to +70°C		
Cooling	Temperature Controlled Cooling Fan		
Dimensions	445 (L) x 424 (W) x 88 (H) mm / 17.52" (L) x 16.70" (W) x 3.47" (H)		
Weight	28.2 lbs / 12.8 Kg		
Rack Units	2 Rack Units		
Available AC Output Sockets (Add Designator to Model)	Type Terminal Strip 4 x North American NEMA 5-20 2 x North American GFCI 2 x Universal Socket	Designator -A -B -C -D	Other Types Available Under Request

COMPLIANCE

Safety	EN60950-1
EMC	FCC Class A, ANSI C63.4: 2003, CISPR 22: 2005

MODEL				
ST-3121	ST-3241	ST-3481	ST-3111	ST-3221

ELECTRICAL

Continuous Output Power	3000 W / 3KVA				
Surge Rating	3200 W for 3 minutes 3500 W for 3 seconds				
Peak Power	6000 W				
Input Voltage	10-16 VDC	20-32 VDC	42-62 VDC	90-140 VDC	180-275 VDC
Input Current (No Load)	1.5 A	0.82 A	0.39 A	0.16 A	0.11 A
Efficiency (full load)	86%	88%	89%	94%	94%
Output Voltage	100, 110, 115, 120 VAC (Switch Selectable)				
Output Voltage Regulation	± 3.0%				
Output Frequency	50/60Hz ± 0.05% (Switch Selectable)				
Peak Output Current	54A				
Power Factor	1.0				
Output Waveform	Pure Sine Wave				
THD	<3%, Reactive Load				
Protections	Output Overload, Output Short Circuit, Input Under Voltage, Input Over Voltage, Over Temperature, Input Reverse Polarity (Fuse) , AC Input Breaker				
Digital Display	Output Voltage, Output Current, Output Power, Output Frequency, Input Voltage, Temperature, Alarms				
Interface Control Port	RS-232C , Switch Selectable Baud Rate: 2400, 4800, 9600, 19200				
Alarm Relay	Dry Contacts, Form-C				
Remote Control	Optional				
SNMP Management	Optional				

BYPASS (STATIC TRANSFER SWITCH)

AC Input Range	90 - 130 VAC
AC Input Frequency	50 – 60 Hz ± 3 Hz
Transfer Time	4 – 6 ms

PHYSICAL

Operating Temperature	-30°C to +60°C		
Storage Temperature	-30°C to +70°C		
Cooling	Temperature Controlled Cooling Fan		
Dimensions	445 (L) x 424 (W) x 88 (H) mm / 17.52" (L) x 16.70" (W) x 3.47" (H)		
Weight	31.5 lbs / 14.3 Kg		
Rack Units	2 Rack Units		
Available AC Output Sockets (Add Designator to Model)	Type Terminal Strip 4 x North American NEMA 5-20 2 x North American GFCI 2 x Universal Socket	Designator -A -B -C -D	Other Types Available Under Request NEMA & GFCI outlets are not recommended on 3KVA inverters

COMPLIANCE

Safety	EN60950-1
EMC	FCC Class A, ANSI C63.4: 2003, CISPR 22: 2005

MODEL			
ST-5241	ST-5481	ST-5111	ST-5221

ELECTRICAL

Continuous Output Power	5000 W / 5KVA			
Surge Rating	5200 W for 3 minutes			
Peak Power	10000 W			
Input Voltage	20-32 VDC	42-62 VDC	90-140 VDC	180-275 VDC
Input Current (No Load)	1.64 A	0.82 A	0.42 A	0.24 A
Efficiency (full load)	85%	87%	90%	92%
Output Voltage	100, 110, 115, 120 VAC (Switch Selectable)			
Output Voltage Regulation	± 3.0%			
Output Frequency	50/60Hz ± 0.05% (Switch Selectable)			
Peak Output Current	91A			
Power Factor	1.0			
Output Waveform	Pure Sine Wave			
THD	<3%, Reactive Load			
Protections	Output Overload, Output Short Circuit, Input Under Voltage, Input Over Voltage, Over Temperature, Input Reverse Polarity (Fuse), AC Input Breaker			
Digital Display	Output Voltage, Output Current, Output Power, Output Frequency, Input Voltage, Temperature, Alarms			
Interface Control Port	RS-232C , Switch Selectable Baud Rate: 2400, 4800, 9600, 19200			
Alarm Relay	Dry Contacts, Form-C			
Remote Control	Optional			
SNMP Management	Optional			

BYPASS (STATIC TRANSFER SWITCH)

AC Input Range	90 - 130 VAC
AC Input Frequency	50 – 60 Hz ± 3 Hz
Transfer Time	4 – 6 ms

PHYSICAL

Operating Temperature	-30°C to +60°C		
Storage Temperature	-30°C to +70°C		
Cooling	Temperature Controlled Cooling Fan		
Dimensions	504 (L) x 425 (W) x 132 (H) mm / 19.85" (L) x 16.73" (W) x 5.2" (H)		
Weight	41.85 lbs / 19.0 Kg		
Rack Units	3 Rack Units		
Available AC Output Sockets (Add Designator to Model)	Type Terminal Strip 4 x North American NEMA 5-20 2 x North American GFCI 2 x Universal Socket	Designator -A -B -C -D	Other Types Available Under Request NEMA & GFCI outlets are not recommended on 5KVA inverters

COMPLIANCE

Safety	EN60950-1
EMC	FCC Class A, ANSI C63.4: 2003, CISPR 22: 2005

MODEL				
ST-2122	ST-2242	ST-2482	ST-2112	ST-2222

ELECTRICAL

Continuous Output Power	2000 W / 2KVA				
Surge Rating	2300 W for 3 minutes 2500 W for 3 seconds				
Peak Power	4000 W				
Input Voltage	10-16 VDC	20-32 VDC	42-62 VDC	90-140 VDC	180-275 VDC
Input Current (No Load)	1.79 A	0.87 A	0.4 A	0.4 A	0.2 A
Efficiency (full load)	87%	90%	92%	94%	94%
Output Voltage	200, 220, 230, 240 VAC (Switch Selectable)				
Output Voltage Regulation	± 3.0%				
Output Frequency	50/60Hz ± 0.05% (Switch Selectable)				
Peak Output Current	16A				
Power Factor	1.0				
Output Waveform	Pure Sine Wave				
THD	<3%, Reactive Load				
Protections	Output Overload, Output Short Circuit, Input Under Voltage, Input Over Voltage, Over Temperature, Input Reverse Polarity (Fuse) , AC Input Breaker				
Digital Display	Output Voltage, Output Current, Output Power, Output Frequency, Input Voltage, Temperature, Alarms				
Interface Control Port	RS-232C , Switch Selectable Baud Rate: 2400, 4800, 9600, 19200				
Alarm Relay	Dry Contacts, Form-C				
Remote Control	Optional				
SNMP Management	Optional				

BYPASS (STATIC TRANSFER SWITCH)

AC Input Range	180 - 260 VAC
AC Input Frequency	50 – 60 Hz ± 3 Hz
Transfer Time	4 – 6 ms

PHYSICAL

Operating Temperature	-30°C to +60°C		
Storage Temperature	-30°C to +70°C		
Cooling	Temperature Controlled Cooling Fan		
Dimensions	445 (L) x 424 (W) x 88 (H) mm / 17.52" (L) x 16.70" (W) x 3.47" (H)		
Weight	28.2 lbs / 12.8 Kg		
Rack Units	2 Rack Units		
Available AC Output Sockets (Add Designator to Model)	Type Terminal Strip 4 x North American NEMA 5-20 2 x Continental European (SCHUKO) 2 x Universal Socket	Designator -A -B -E -D	Other Types Available Under Request

COMPLIANCE

Safety	EN60950-1
EMC	EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11

MODEL				
ST-3122	ST-3242	ST-3482	ST-3112	ST-3222

ELECTRICAL

Continuous Output Power	3000 W / 3KVA				
Surge Rating	3200 W for 3 minutes 3500 W for 3 seconds				
Peak Power	6000 W				
Input Voltage	10-16 VDC	20-32 VDC	42-62 VDC	90-140 VDC	180-275 VDC
Input Current (No Load)	2.2A	1.08A	0.55A	0.28A	0.12A
Efficiency (full load)	86%	88%	89%	94%	94%
Output Voltage	200, 220, 230, 240 VAC (Switch Selectable)				
Output Voltage Regulation	± 3.0%				
Output Frequency	50/60Hz ± 0.05% (Switch Selectable)				
Peak Output Current	27 A				
Power Factor	1.0				
Output Waveform	Pure Sine Wave				
THD	<3%, Reactive Load				
Protections	Output Overload, Output Short Circuit, Input Under Voltage, Input Over Voltage, Over Temperature, Input Reverse Polarity (Fuse) , AC Input Breaker				
Digital Display	Output Voltage, Output Current, Output Power, Output Frequency, Input Voltage, Temperature, Alarms				
Interface Control Port	RS-232C , Switch Selectable Baud Rate: 2400, 4800, 9600, 19200				
Alarm Relay	Dry Contacts, Form-C				
Remote Control	Optional				
SNMP Management	Optional				

BYPASS (STATIC TRANSFER SWITCH)

AC Input Range	180 - 260 VAC
AC Input Frequency	50 – 60 Hz ± 3 Hz
Transfer Time	4 – 6 ms

PHYSICAL

Operating Temperature	-30°C to +60°C		
Storage Temperature	-30°C to +70°C		
Cooling	Temperature Controlled Cooling Fan		
Dimensions	445 (L) x 424 (W) x 88 (H) mm / 17.52" (L) x 16.70" (W) x 3.47" (H)		
Weight	31.5 lbs / 14.3 Kg		
Rack Units	2 Rack Units		
Available AC Output Sockets (Add Designator to Model)	Type Terminal Strip 4 x North American NEMA 5-20 2 x Continental European (SCHUKO) 2 x Universal Socket	Designator -A -B -E -D	Other Types Available Under Request NEMA outlets are not recommended on 3KVA inverters

COMPLIANCE

Safety	EN60950-1
EMC	EN 55022:2006, Class, A EN 61000-3-2: 2006 EN 61000-3-3: 1995+A1: 2001+A2: 2005

MODEL			
ST-5242	ST-5482	ST-5112	ST-5222

ELECTRICAL

Continuous Output Power	5000 W / 5KVA			
Surge Rating	5200 W for 3 minutes			
Peak Power	10000 W			
Input Voltage	20-32 VDC	42-62 VDC	90-140 VDC	180-275 VDC
Input Current (No Load)	1.3 A	0.68 A	0.35 A	0.18 A
Efficiency (full load)	90%	92%	94%	94%
Output Voltage	200, 220, 230, 240 VAC (Switch Selectable)			
Output Voltage Regulation	± 3.0%			
Output Frequency	50/60Hz ± 0.05% (Switch Selectable)			
Peak Output Current	45 A			
Power Factor	1.0			
Output Waveform	Pure Sine Wave			
THD	<3%, Reactive Load			
Protections	Output Overload, Output Short Circuit, Input Under Voltage, Input Over Voltage, Over Temperature, Input Reverse Polarity (Fuse), AC Input Breaker			
Digital Display	Output Voltage, Output Current, Output Power, Output Frequency, Input Voltage, Temperature, Alarms			
Interface Control Port	RS-232C , Switch Selectable Baud Rate: 2400, 4800, 9600, 19200			
Alarm Relay	Dry Contacts, Form-C			
Remote Control	Optional			
SNMP Management	Optional			

BYPASS (STATIC TRANSFER SWITCH)

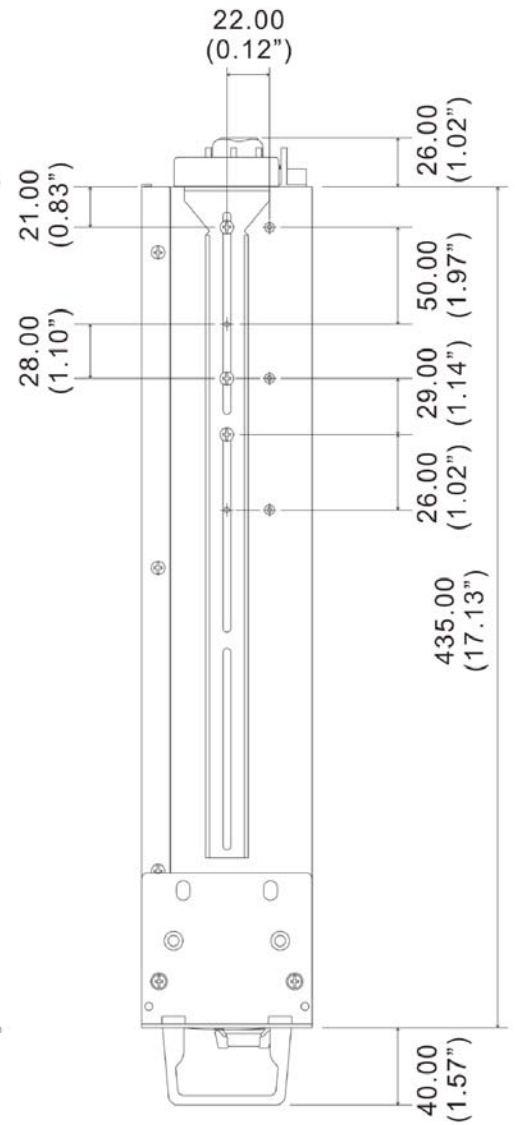
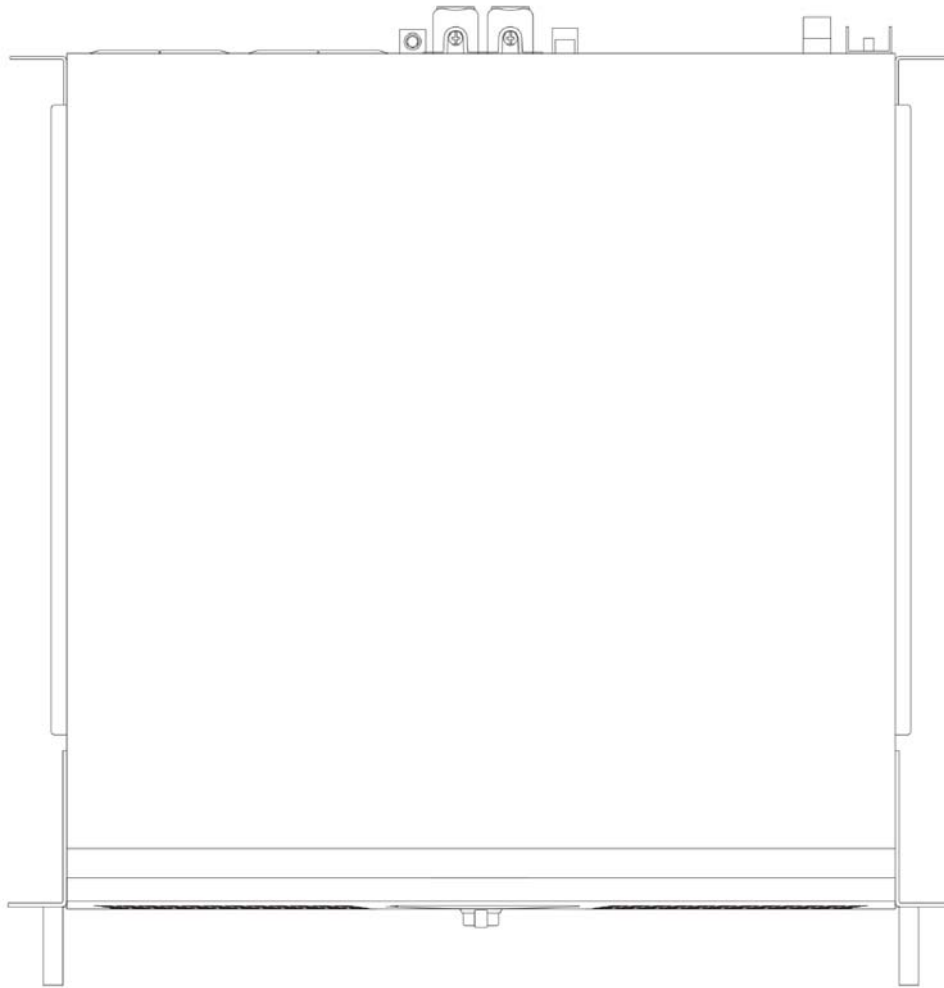
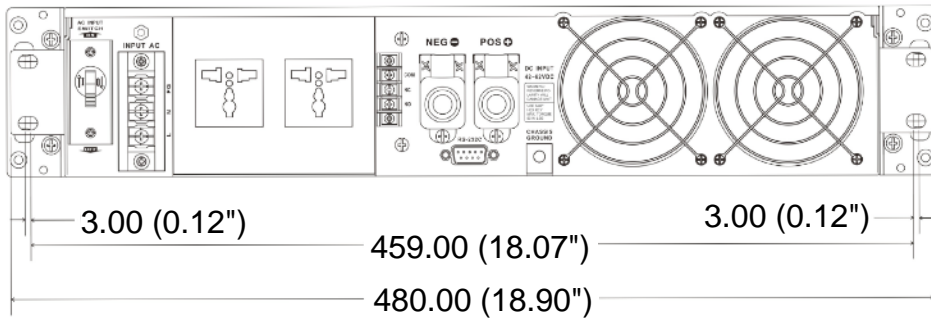
AC Input Range	180 - 260 VAC
AC Input Frequency	50 – 60 Hz ± 3 Hz
Transfer Time	4 – 6 ms

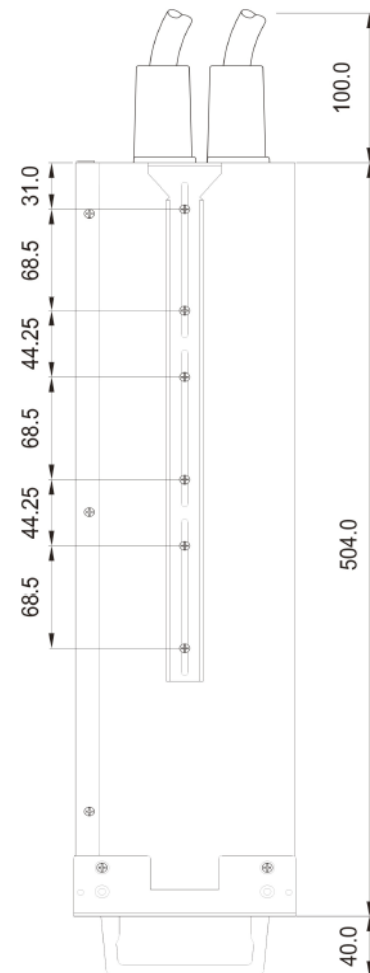
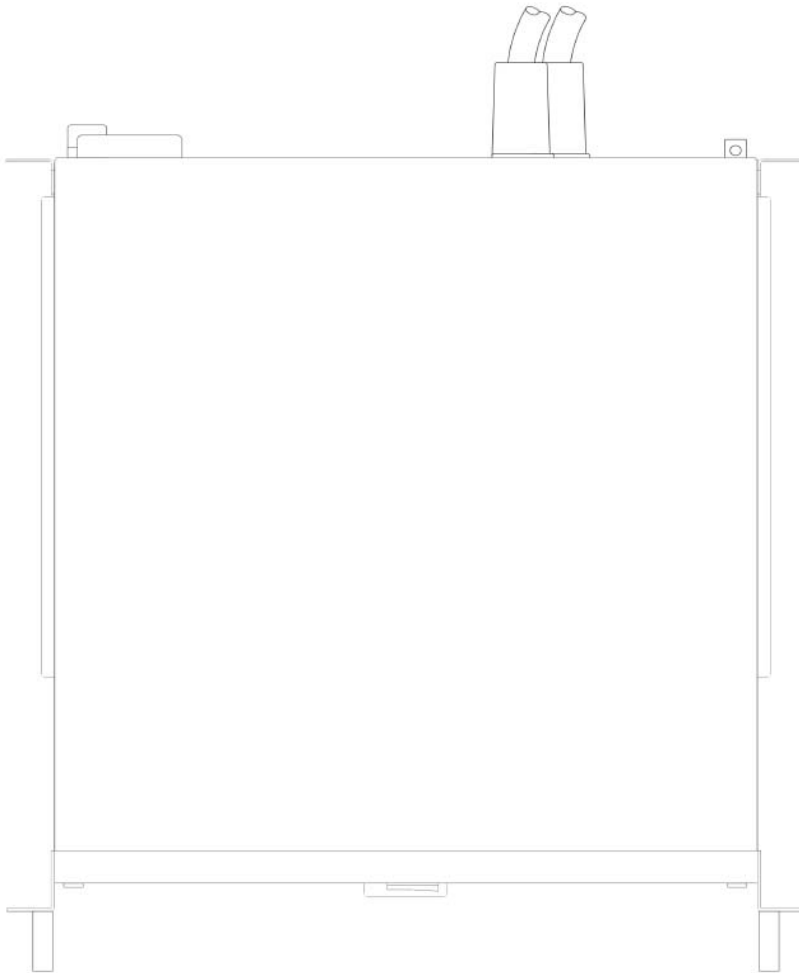
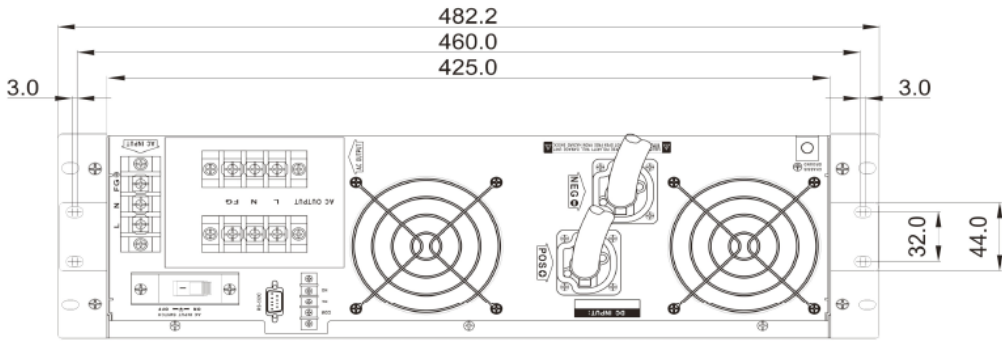
PHYSICAL

Operating Temperature	-30°C to +60°C		
Storage Temperature	-30°C to +70°C		
Cooling	Temperature Controlled Cooling Fan		
Dimensions	504 (L) x 425 (W) x 132 (H) mm / 19.85" (L) x 16.73" (W) x 5.2" (H)		
Weight	41.85 lbs / 19.0 Kg		
Rack Units	3 Rack Units		
Available AC Output Sockets (Add Designator to Model)	Type Terminal Strip 4 x North American NEMA 5-20 2 x Continental European (SCHUKO) 2 x Universal Socket	Designator -A -B -E -D	Other Types Available Under Request NEMA & Schuko outlets are not recommended on 5KVA inverters

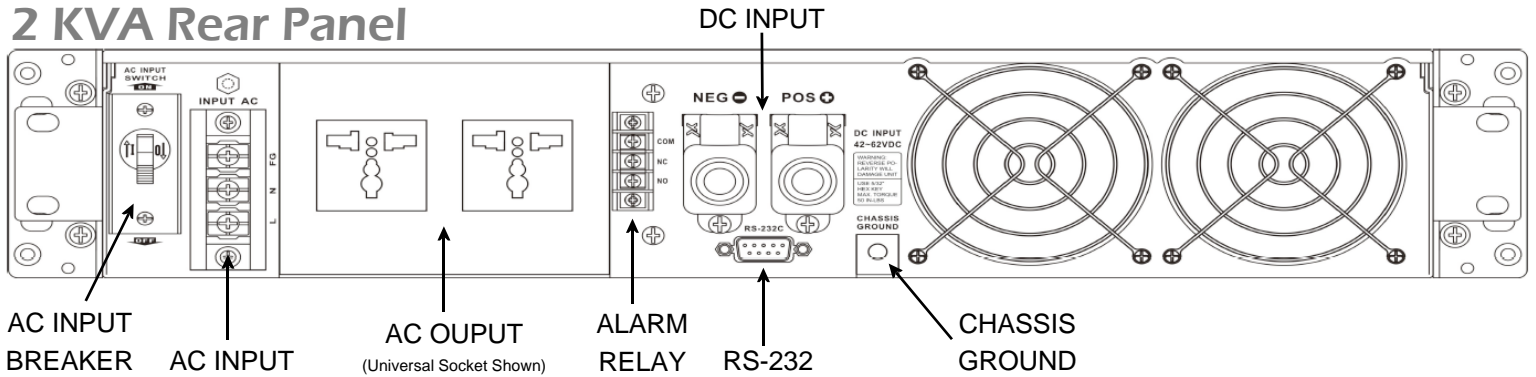
COMPLIANCE

Safety	EN60950-1
EMC	EN 55022:2006, Class A, EN 61000-3-2: 2006 EN 61000-3-3: 1995+A1: 2001+A2: 2005

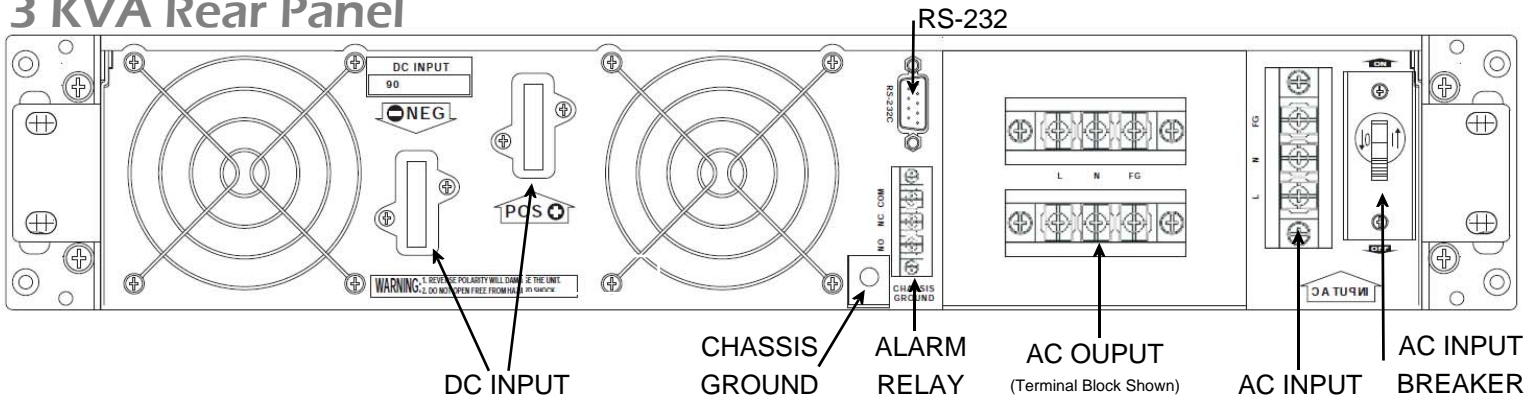




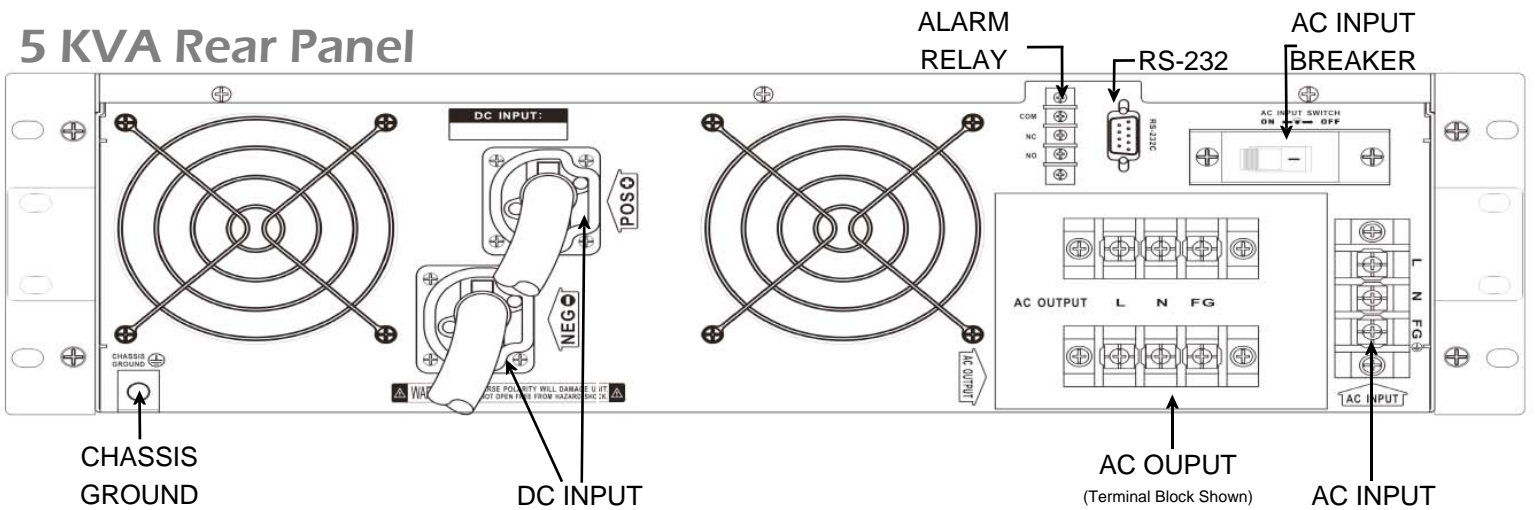
2 KVA Rear Panel

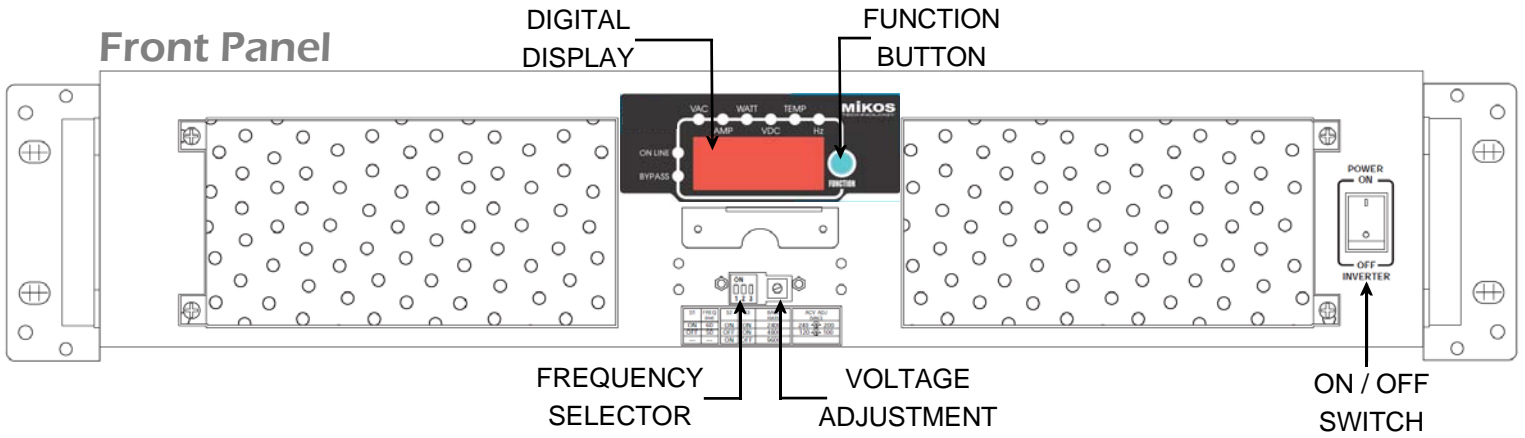



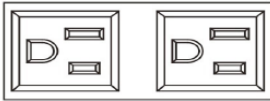

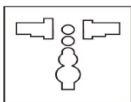
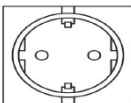
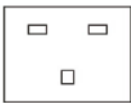


3 KVA Rear Panel



5 KVA Rear Panel





Drawing	Description	Recommended Power	Designator
	Terminal Strip	2 KVA, 3 KVA, 5 KVA	-A
	North American NEMA 5-20	2 KVA	-B
	North American GFCI	2 KVA	-C
	Universal Socket	2 KVA, 3 KVA	-D
	Continental European (SCHUKO)	2 KVA, 3 KVA	-E
	United Kingdom	2 KVA, 3 KVA	-F
	Australia / New Zealand	2 KVA, 3 KVA	-G
	Q723-CQ	2 KVA, 3 KVA	-H

- 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