

SCIMITAR SERIES RACK-MOUNT TELECOM INVERTERS WITH STATIC TRANSFER SWITCH

DESCRIPTION

The SCIMITAR Series are 1kVA & 2kVA sine-wave inverters which are 19" rack-mountable and only 1RU high. They operate from a 12V, 24V or 48VDC source and produce a 115 or 230VAC output. The low distortion 50 or 60Hz sine wave is produced by DSP controlled power circuits using an advanced high frequency, pulse-width modulation technique which achieves up to 92% efficiency.

A built-in Static Transfer Switch allows connection of a utility or other AC power source which can be switched to the load automatically in the event that the inverter switches off.

A front panel LED display indicates various inverter statuses.

Output voltage and frequency are programmable from the front panel, as well as Baud Rate for the RS232 communications interface which can be used for remote monitoring.

FEATURES

- ◆ One Rack Spaces High: 1.75"
- ◆ 19-Inch Rack Mounting
- ◆ 1000 or 2000 VA Output Capacity
- ◆ 115VAC or 230VAC Output
- ◆ 50 or 60Hz Low Distortion Sine Wave
- ◆ 12, 24 or 48VDC Input
- ◆ 90% Typical Efficiency
- ◆ Static Transfer Switch Built-in
- ◆ Programmable Output Voltage and Frequency
- ◆ Powers Reactive Loads
- ◆ LED Status Display

TWO-YEAR WARRANTY



STANDARD MODELS

MODEL	OUTPUT POWER	OUTPUT VOLTS	INPUT VOLTS
YK-PSW121KVA	1000VA @ 0.85PF 850W @ 1.0PF	115VAC	12VDC
YK-PSW241KVA			24VDC
YK-PSW481KVA			48VDC
YK-PSW121KVAE		230VAC	12VDC
YK-PSW241KVAE	24VDC		
YK-PSW481KVAE	48VDC		
YK-PSW122KVA(1U)	2000VA @ 0.85PF 1700W @ 1.0PF	115VAC	12VDC
YK-PSW242KVA(1U)			24VDC
YK-PSW482KVA(1U)			48VDC
YK-PSW122KVAE(1U)		230VAC	12VDC
YK-PSW242KVAE(1U)	24VDC		
YK-PSW482KVAE(1U)	48VDC		

Notes:

1. 115VAC models are shipped pre-programmed to 60Hz.
230VAC models are shipped pre-programmed to 50Hz.
115VAC models have 2 x NEMA 5-15 outlet sockets.
230VAC models have 2 x IEC60320-C13 outlet sockets.
2. If in doubt about load PF (Power Factor) assume that it is 1.0PF.

SAFETY STANDARDS

UL60950-1
CSA22.2, No. 60950-1
EN60950-1



SPECIFICATIONS FOR 1KVA MODELS

MODEL NUMBER	YK-PSW121KVA	YK-PSW241KVA	YK-PSW481KVA	YK-PSW121KVAE	YK-PSW241KVAE	YK-PSW481KVAE
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Inverter Section

Input Voltage	10-16VDC	20-32VDC	42-62VDC	10-16VDC	20-32VDC	42-62VDC
Output Power	1000VA @ ±0.85 power Factor 800W @ Unity Power Factor					
Surge Rating	900W for 1 minute 950W for 3 second 1000W for 1 second					
Efficiency @ FL	86%	88%	89%	87%	90%	92%
Output Voltage	100/110/115/120VAC ±3% (switch selectable)			200/220/230/240VAC ±3% (switch selectable)		
Output Frequency	50Hz or 60Hz ±0.05% (switch selectable)					
Peak Output Current	15A			9A		
No Load Current	0.75A	0.4A	0.3A	0.7A	0.35A	0.25A
Output Waveform	Pure Sine Wave <3% THD (R Load)					
Protection	Output Overload - Output Short Circuit Input Reverse Polarity (fuse) - Input Undervoltage - Input Overvoltage Over Temperature					
Digital Display	OVP - UVP - OTP - OLP - VAC AMP - WATT - VDC - TEMP - Hz					
Control Port	RS232C Baud Rates - 2400, 4800, 9600, 19200 (switch selectable)					

STS Section

AC Input Range	90 - 130VAC (110VAC nominal)	180-260VAC (230VAC nominal)
Frequency	47 - 63Hz	
Transfer Time	4 - 6ms	

General

Temperature Range	-30°C to +60°C Operating -30°C to +70°C Storage
Safety & EMI	CE & FCC, cUL60950-1
Dimensions	16.1"(d) x 19"(w) x 1.73"(h) 408.7mm(d) x 484.0mm(w) x 44.0mm(h)
Mounting	19" rack-mount, 1U high
Weight	14.3lbs / 6.5Kg

SPECIFICATIONS FOR 2KVA MODELS

MODEL NUMBER	YK-PSW122KVA	YK-PSW242KVA	YK-PSW482KVA	YK-PSW122KVAE	YK-PSW242KVAE	YK-PSW482KVAE
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Inverter Section

Input Voltage	10-16VDC	20-32VDC	42-62VDC	10-16VDC	20-32VDC	42-62VDC
Output Power	2000VA @ ±0.85 power Factor 1700W @ Unity Power Factor					
Surge Rating	1870W for 1 minute 2040W for 20 second					
Efficiency @ FL	86%	88%	90%	87%	90%	92%
Output Voltage	100/110/115/120VAC ±3% (switch selectable)			200/220/230/240VAC ±3% (switch selectable)		
Output Frequency	50Hz or 60Hz ±0.05% (switch selectable)					
Peak Output Current	25A			11A		
No Load Current	1.45A	0.7A	0.45A	1.47A	0.8A	0.47A
Output Waveform	Pure Sine Wave <3% THD (R Load)					
Protection	Output Overload - Output Short Circuit Input Reverse Polarity (fuse) - Input Undervoltage - Input Overvoltage Over Temperature					
Digital Display	OVP - UVP - OTP - OLP - VAC AMP - WATT - VDC - TEMP - Hz					
Control Port	RS232C Baud Rates - 2400, 4800, 9600, 19200 (switch selectable)					

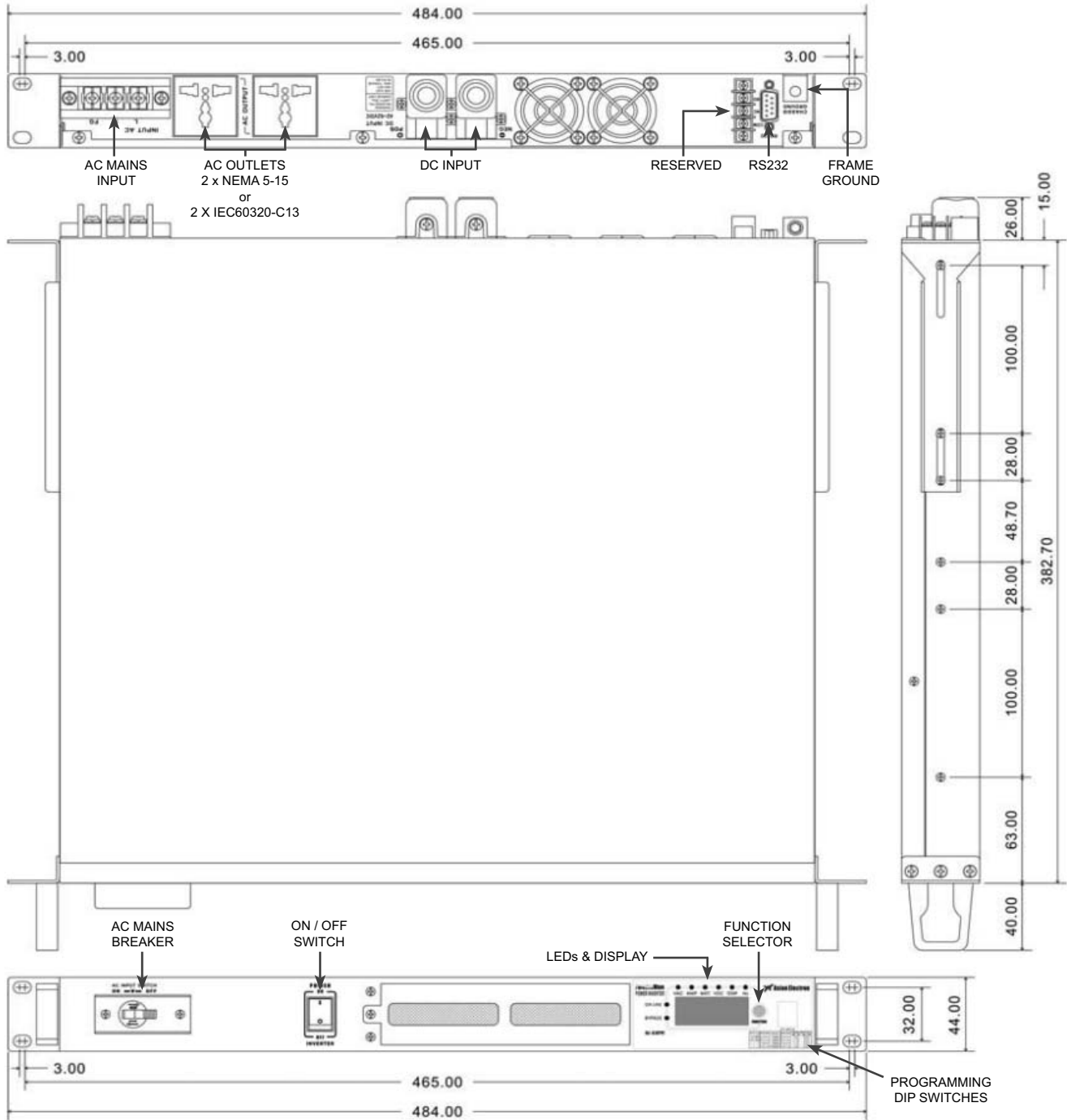
STS Section

AC Input Range	90 - 130VAC (110VAC nominal)	180-260VAC (230VAC nominal)
Frequency	47 - 63Hz	
Transfer Time	4 - 6ms	

General

Temperature Range	-30°C to +60°C Operating -30°C to +70°C Storage
Safety & EMI	CE & FCC, cUL60950-1
Dimensions	16.1"(d) x 19"(w) x 1.73"(h) 408.7mm(d) x 484.0mm(w) x 44.0mm(h)
Mounting	19" rack-mount, 1U high
Weight	16.5lbs / 7.5Kg

MECHANICAL DRAWING



Standard Outlet Sockets: 2 x NEMA for 120VAC models, 2 x IEC60320-C13 for 230VAC models.