

Models SS100 (A)**28 VDC to 100 VAC, 60 Hz sine wave static inverter****概要**

SS100 (A) は、オーディオ/ビデオエンターテインメントシステム、ポータブルコンピューター、電気通信機器、EMS（緊急医療機器）およびその他の機器に電力を供給するように設計されており、航空機の28 VDC 電気システムから 100 VAC、60Hz、正弦波へ変換するインバーターです。また、定格連続出力は 1KVA です。

技術的特性（仕様）**入力：**

電圧：28 VDC（範囲：20~36.5 VDC）
電流：1.5 ADC（負荷なし）
42 ADC（通常）28 VDC（全負荷時）

出力：

電圧：100 Vrms \pm 5 Vrms
電流：10 AAC 全負荷時（通常）
電力：1 KVA
周波数：60 Hz \pm 0.2 Hz
フェーズ波形：単相、正弦
高調波歪み：0.5%（通常）
規定：1%ライン、1%負荷、2.5%温度
過負荷容量：2時間の定格出力の110%；定格出力の150%、
5分間（55℃以上では、最大過負荷は135%に制限）

保護回路：ユニットは下記の条件下でシャットダウン：

入力電圧 > 37.5 VDC \pm 1 VDC
入力電圧 < 18.0 VDC \pm 1.5 VDC
内部高温（100℃以上）
出力ショート（リモートオン、オフまたは入力 VDC による 手動リセット）

冷却：サーモスタット制御のブラシレスファン、50℃以上

動作温度：-65°F ~ +160°F（-55℃ ~ +70℃）

高度：55,000Ft.

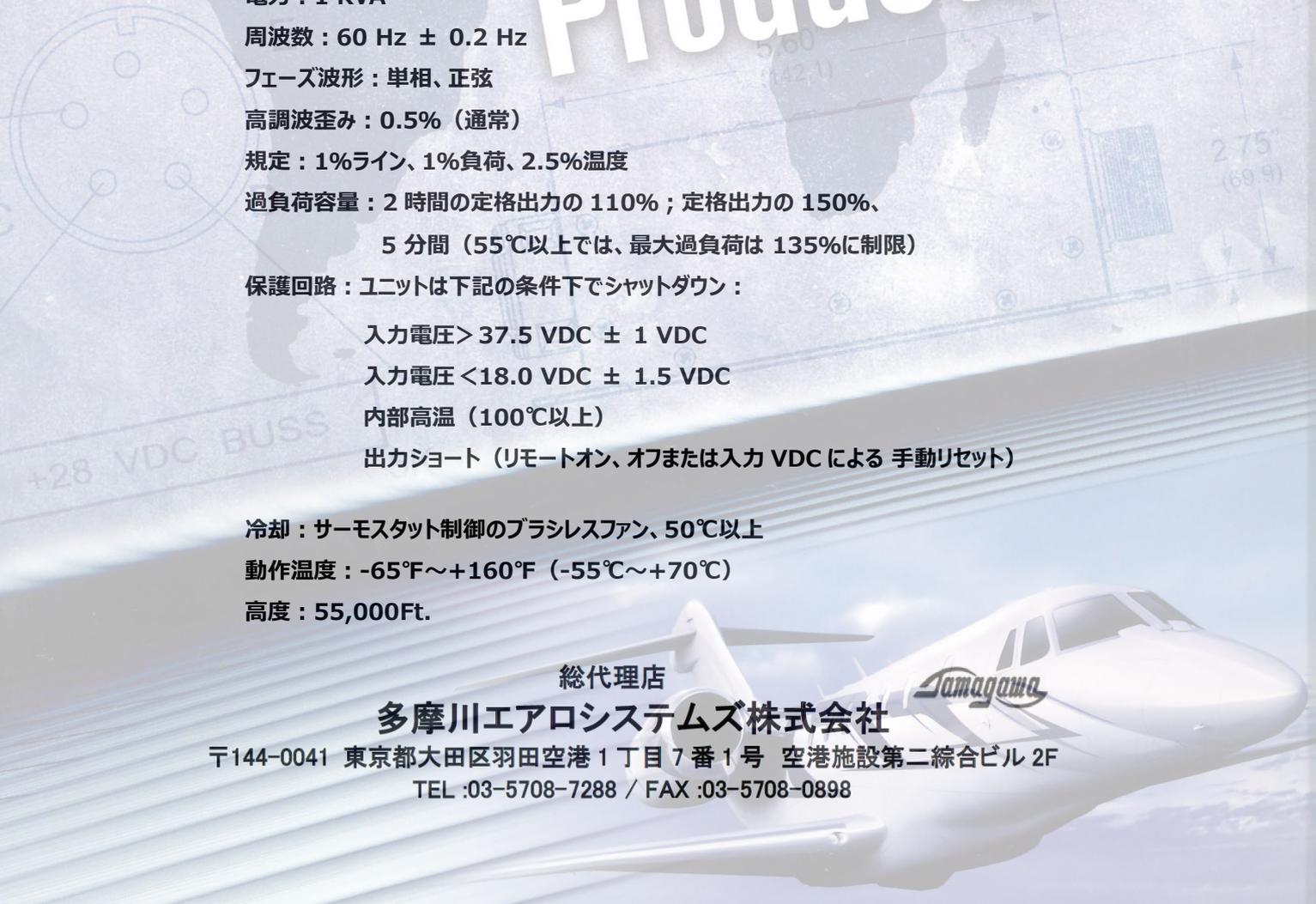
総代理店

多摩川エアロシステムズ株式会社

〒144-0041 東京都大田区羽田空港1丁目7番1号 空港施設第二総合ビル 2F

TEL :03-5708-7288 / FAX :03-5708-0898

Power
Conversion
Products



Models SS100(A)

28 VDC to 100 VAC, 60 Hz sine wave static inverter

kgs
electronics

環境条件：

条件：DO-160C Env. Cat. F3ZBB[LV]E1XXXXXBAXXXZXX

コンプライアンス：FAA TSO - C73

仕上げ：MIL-C-5541、クラス 1A に基づくゴールドイリダイト

重量：7.8 ± 0.3 Lbs (3.55 ± 0.15 Kg)

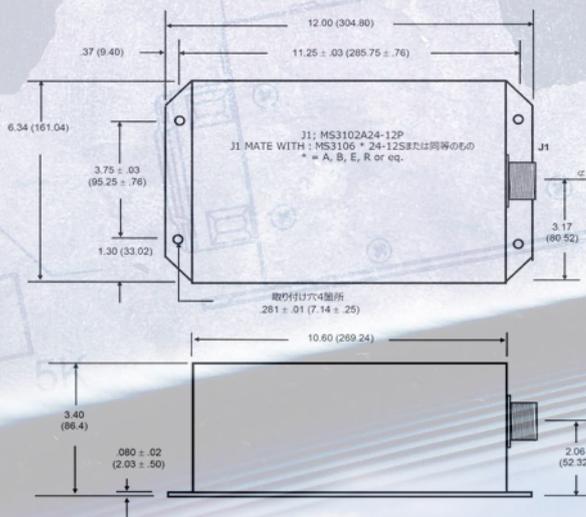
サイズ：3.40 H× 6.34 W× 12.00 L inches コネクタとねじ頭の突出がない状態

86.4 H× 161.0 W× 304.8 L mm



Power
conversion
Products

※写真はイメージです



総代理店

多摩川エアロシステムズ株式会社

〒144-0041 東京都大田区羽田空港1丁目7番1号 空港施設第二総合ビル 2F

TEL :03-5708-7288 / FAX :03-5708-0898

Tamagawa

KGS Electronics advanced switch-mode SS and SB series sine wave static power inverters meet the stringent airborne performance standards under FAA TSO-C73, airborne static DC-AC electrical power conversion. The SS (60Hz) and SB (50Hz) series static inverters utilize the latest state of the art, DC to AC solid state circuitry and are highly efficient, compact and lightweight.

Design features include a crystal controlled oscillator for output frequency stability and a pulse-width-modulated driven square to sine wave power conversion topology resulting in clean, responsive and reliable AC output power. All static inverters provide full regulated AC output voltage, overload protection and current limiting.

The SS and SB Series static inverters are designed to provide AC power in cabin, galley, cockpit and lavatory environments to operate laptop computers, audio/video entertainment systems, portable electronics (stereo, MP3, CD, DVD, video games, etc.), microwave ovens, coffee makers, medical equipment, office and personal appliances in airborne, marine and ground mobile applications.

MODEL	INPUT	OUTPUT	POWER	FREQ	SIZE	WEIGHT
SS40	28VDC	115VAC	400VA	60Hz	8.15" L X 6.34" W X 2.75" H	3.8 lbs
SS50	28VDC	115VAC	500VA	60Hz	9.50" L X 6.34" W X 3.50" H	4.3 lbs
SS60	28VDC	115VAC	600VA	60Hz	9.50" L X 6.34" W X 3.50" H	4.3 lbs
SS100, SS101	28VDC	115VAC	1000VA	60Hz	12.00" L x 6.34" W x 3.40" H	7.8 lbs
SS120	28VDC	115VAC	1200VA	60Hz	12.00" L x 6.34" W x 3.40" H	7.8 lbs
SS200	28VDC	115VAC	2000VA	60Hz	14.00" L x 6.51" W x 6.23" H	17.7 lbs
SB100	28VDC	230VAC	1000VA	50Hz	12.00" L x 6.34" W x 3.40" H	7.8 lbs
SB120	28VDC	230VAC	1200VA	50Hz	12.00" L x 6.34" W x 3.40" H	7.8 lbs
SB200	28VDC	230VAC	2000VA	50Hz	14.00" L x 6.51" W x 6.23" H	17.7 lbs



KGS Electronics
418 East Live Oak Avenue
Arcadia CA 91006-5619 US
Tel: 626.574.1175 · Fax: 626.574.0553
www.kgselectronics.com

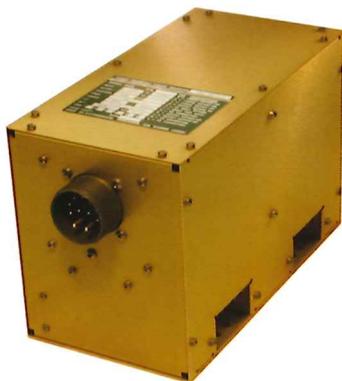
KGS Electronics 400Hz static inverters are compact, lightweight and extremely reliable. These static inverters utilize advanced, solid state circuitry to invert a 28VDC input to a 115VAC, 400 Hz sine wave output. Single and three phase 400Hz models are available.

All KGS Electronics 400Hz static inverters meet FAA TSO-C73 airborne performance standards for applications in airborne instrument, compass, gyro, radar and navigation equipment systems.

Design topologies include a crystal controlled PWM driven switch-mode conversion process that provides clean AC voltage and output frequency stability. Other static inverters utilize a 400Hz resonant circuit, amplified, filtered and driven by an integrated PWM signal in conjunction with a "True RMS to DC Converter" IC for regulation. All design topologies provide full regulated AC voltage, overload protection and current limiting.

MODEL	INPUT	OUTPUT	POWER	WT	FEATURES
SC3	28VDC	115VAC	30VA	1.0 Lbs	
SC50	28VDC	115VAC/26VAC	500/100VA	4.9 Lbs	Rem
SC60	28VDC	115VAC/26VAC	600/100VA	4.9 Lbs	Rem
SC100	28VDC	115VAC	1000VA	7.8 Lbs	Rem
SC150	28VDC	115VAC 1 Phase 400Hz WYE	1500VA	15.2 Lbs	Rem
SE25	28VDC	115VAC 3 Phase 400Hz WYE	250VA	8.4 Lbs	
SEA150	28VDC	115VAC 3 Phase 400Hz WYE	1500VA	16.2 Lbs	Rem
SPC-5()	28VDC	115VAC/26VAC	50/30VA	2.5 Lbs	
SPC-5(B)	28VDC	115VAC/26VAC	50/30VA	2.5 Lbs	F/M, Rem
SPC-5(C)	28VDC	26VAC	50VA	2.5 Lbs	
SPC-5(D)	14VDC	115VAC/26VAC	50/30VA	2.5 Lbs	
SPC-10()	28VDC	115VAC/26VAC	100/60VA	5.0 Lbs	
SPC-10(D)	28VDC	115VAC/26VAC	250/150VA	5.1 Lbs	F/M, Rem
SPC-10(E)	28VDC	115VAC/26VAC	125/50VA	5.0 Lbs	Rem
SPC-10(F)	28VDC	115VAC/26VAC	250/150VA	5.1 Lbs	P/L, Rem
SPC-10(H)	28VDC	115VAC/26VAC	350/150VA	5.3 Lbs	P/L, F/M & Rem
SPC-10(J)	28VDC	115VAC/26VAC	250/150VA	5.1 Lbs	P/L, F/M & Rem
SPC-10(T),(U)	28VDC	115VAC/26VAC	250/150VA	5.1 Lbs	P/L, (U) Rem
SPC-10(V)	28VDC	115VAC	250VA	5.2 Lbs	w/ Adapter Plate

(F/M Fault Monitor, P/L Phase Lock, Rem Remote On/Off)



KGS Electronics
 418 East Live Oak Avenue
 Arcadia CA 91006-5619 US
 Tel: 626.574.1175 • Fax: 626.574.0553
www.kgselectronics.com

KGS Electronics DC to DC power converters meet the stringent standards of airborne applications under FAA TSO-C71 regulatory requirements. KGS DC converters are small, lightweight, efficient and incorporate PWM regulation and control topologies. These converters also utilize MOSFET and IGBT power switching and SMT (surface mount technology) components. All KGS DC converter products are capable of operating within environmental test parameters of RTCA DO-160D/E, MIL-STD-810D and MIL-STD-461E.

DC power converters are available with variable and fixed 5VDC, 12VDC, 14VDC and/or 28VDC regulated output. Standard ratings are available from 10 watts to over 800 watts of continuous output power. All DC power converters provide full regulated output voltage, overload protection and current limiting.

Highly regulated DC boost converter models (RR18, RHB40, RH70) provide stable DC output voltage over a wide input voltage range (8-28Vdc). These models are able to maintain bus DC voltages (20-22Vdc) to critical equipment during engine starts or low voltage transient conditions.

MODEL	INPUT	OUTPUT	POWER	FEATURES
RM1	28VDC	3.8VDC	75mA	Reg. Fixed Output Voltage (NVG)
RB125, RB126	14VDC	28VDC	5A	Reg. Fixed Output Voltage
LT-46(D)	28VDC	13.8VDC	4A	Reg Fixed Output Voltage
LT-46(C)	28VDC	Reg 12VDC	4.2A	Fixed Output Voltage
LT-71,LT-71A	28VDC	Reg 14VDC	8A	Fixed Output Voltage
LT-57(F)	28VDC	Reg 14VDC	10A	Fixed Output Voltage
LT-246(C)	28VDC	Reg 12VDC	12A	Fixed Output Voltage
RG28	28VDC	14VDC	0-20A	Reg. Fixed Output Voltage
RG40	28VDC	14VDC	0-30A	Reg. Fixed Output Voltage
RG56	28VDC	14VDC	40A	Reg. Fixed Output Voltage
RH28	14VDC	28VDC	10A	Reg. Fixed Output Voltage
RH70	28VDC	240VDC	2.5A	Reg. Fixed Output Voltage
RHB40	8-24VDC	24VDC	400W	Reg. Boost Converter
RR18	10-24VDC	24VDC	180W	Reg. Boost Converter



KGS Electronics light dimming power converters utilize a pulse width-modulated (PWM) DC to DC power conversion topology to provide controlled and regulated DC output power. These converters transform unregulated 28 VDC input to variable and regulated output power. The output voltage is adjusted via an external remote control rheostat, potentiometer or externally controlled voltage reference. All DC power converters provide full regulated output voltage, overload protection and current limiting.

KGS Electronics light dimming power converters are primarily designed to control the light intensity of incandescent lighting in aircraft cockpits and cabin environments. All KGS Electronics DC power converters meet the FAA technical standards order (TSO-C71) for airborne static DC-DC electrical power conversion.

MODEL	INPUT	OUTPUT	POWER	FEATURES
LF10	28VDC	Reg 0-5VDC	20A	Potentiometer Control
LH14	28VDC	Reg 0-28VDC	0-5A	Potentiometer Control
LH42	28VDC	Reg 4-28VDC	15A	BRT/DIM Switch Control
LT-248	28VDC	Reg 0-5VDC & 5VDC	7.5A ea.	Rheostat Control
LT-352 & LT-370	28VDC	Reg Triple Output	0-30A, 0-17A	Rheostat Control
LT-3100	28VDC	Reg 3X 0-28Vdc Output	0-9.9A	Rheostat Control
LT-45()	28VDC	Reg 0-28VDC	0-2.5A	Rheostat Control
LT-45(D)	28VDC	Reg 0-28VDC	0-3.6A	Potentiometer Control
LT-45(E)	28Vdc	Reg. 0-28VDC	0-3.6A	Potentiometer Control
LT-48()	28VDC	Reg 0-5VDC	0-7.5A	Rheostat Control
LT-48(B)	28VDC	Reg 0-5VDC	0-7.5A	Rheostat Control
LT-48(D)	28VDC	Reg 0-5VDC	0-10A	Potentiometer Control
LT-48(E)	28VDC	Reg 0-5VDC	0-10A	Potentiometer Control
LT-50	28VDC	Reg 0-5VDC	0-7.5A	Potentiometer Control
LT-52A,LT-53	28VDC	Reg 0-5VDC	0-10A	Rheostat/Voltage Control
LT-55()	28VDC	Reg 0-5VDC	0-15A	Rheostat/Voltage Control
LT-70, LT-73	28VDC	Reg 0-12VDC	0-5.8A	Rheostat/Voltage Control
LT-100,LT-103	28VDC	Reg 0-28VDC	0-3.6A	Rheostat/Voltage Control
LT-101A-BP31	28VDC	Reg 0-28VDC	0-3.6A	Rheostat Control



KGS Electronics
 418 East Live Oak Avenue
 Arcadia CA 91006-5619 US
 Tel: 626.574.1175 • Fax: 626.574.0553
www.kgselectronics.com

AC to AC Frequency Converters

KGS Electronics bench test frequency changers are designed to provide power to avionic test benches for radars, compasses, gyros, HSI's, synchros, navigation equipment and any other instrument requiring 400Hz single or three phase power. All frequency changers are based on advanced, solid state designs with built in overload, voltage and over current protection.

The SPC6-750A solid state frequency changer converts 115VAC 60 Hz to single phase 115VAC 400 Hz sine wave power. The SPC6-750(C) can accept both 115VAC 60Hz and 230VAC 50Hz input power to provide 115VAC 400Hz sine wave power.

The SPC-6-1000-3PH is a solid state three phase frequency changer that accepts 115VAC 60Hz single phase input and provides 115/200Vac 26/45VAC, 400 Hz 3Ø sine wave power. The SPC-6-1000-3PH is designed for use on test benches to power radars, compasses, gyros, and other instruments that require 400Hz three phase AC power.

The SPC-6-1000-3PH-230 and SPC-6-1000-3PHC are frequency changer models available for 230VAC 50 Hz operation.

All models come in rack mountable 19" aluminum cases with front and rear binding posts for the output connections.

MODEL	INPUT	OUTPUT
SPC6-1000-3PH	115VAC 60Hz	115/200 & 26/45VAC 3 Phase 400Hz
SPC6-1000-3PHC	115/220VAC 60/50Hz	115/200 & 26/45VAC 3 Phase 400Hz
SPC6-750A	115VAC 60Hz	115VAC/750VA & 26VAC/500VA 400Hz
SPC6-750C	115/220VAC 60/50Hz	115VAC/750VA & 26VAC/500VA 400Hz



KGS Electronics
418 East Live Oak Avenue
Arcadia CA 91006-5619 US
Tel: 626.574.1175 • Fax: 626.574.0553
www.kgselectronics.com

KGS Electronics advanced switch-mode HS and HB series sine wave AC power converters meet the stringent airborne performance requirements under FAA TSO-C73. The HS and HB series converters are very efficient and lightweight. These converters utilize the latest state of the art, solid state circuitry to convert 115V/400Hz three phase input to 115VAC 60 Hz or 230VAC 50Hz sine wave output.

Design features include a crystal controlled oscillator for output frequency stability and a pulse-width-modulated driven square to sine wave power conversion topology resulting in clean, responsive and reliable AC output power. All static inverters provide full regulated AC output voltage, overload protection and current limiting.

Specific models are available to operate over wild frequency (360-800Hz) with input power factor correction (PFC) and Ground Fault Interrupt (GFI) protected output.

The HS and HB Series power converters are designed to provide reliable AC power in cabin and cockpit environments to operate laptop computers, audio/video entertainment systems, portable electronics (stereo, MP3, CD, DVD, video games, etc.), microwave ovens, coffee makers and medical equipment in airborne, marine and ground mobile applications.

MODEL	INPUT	OUTPUT	SIZE	WT
HB100	115/200 3PH 400Hz	230VAC 50Hz	12.00"L X 6.34"W X 3.40" H	8.1 lbs
HB100(B)	115/200 3PH 360-800Hz PFC	230VAC 50Hz	14.25L X 6.34" W X 3.40" H	9.75 lbs
HB120	115/200 3PH 400Hz	230VAC 50Hz	12.00"L X 6.34"W X 3.40" H	8.1 lbs
HB200	115/200 3PH 400Hz	230VAC 50Hz	14.00" L X 6.51" W X 6.23"H	17.5 lbs
HS50	115/200 3PH 400Hz	115VAC 60Hz	9.50" L X 6.34" W X 3.50" H	4.9 lbs
HS100	115/200 3PH 400Hz	115VAC 60Hz	12.00"L X 6.34"W X 3.40" H	8.1 lbs
HS100(C)	115/200 3PH 360-800Hz PFC	115VAC 60Hz	14.25L X 6.34" W X 3.40"H	9.25 lbs
HS120	115/200 3PH 400Hz	115VAC 60Hz	12.00"L X 6.34"W X 3.40" H	8.1 lbs
HS200	115/200 3PH 400Hz	115VAC 60Hz	14.00" L X 6.51" W X 6.23"H	17.5 lbs

