Results	1.) INVERTER Specification and Features: LS03-06000 – 500 watt model	
FAA TSO Tested FAA TSO Approved	(a.) Example: Aluminum chassis, front mounting, MS connector design. 	Lightweight, High efficiency pure sine wave inverter family designed for 115, 60hz and 230vac 50hz units. • LIGHT WEIGHT: Airborne • Robust design: • High Temp Parts • Pure Sine Wave • SC, OV, UV, OC, RP. • (Transient input) protections
Pass	(b.) Output Signal:	PURE SINE WAVE; Output. .5% THD nominal
Pass	(c.) Output Frequency:	60hz (Fixed)
Pass: YES	(d.) Design	Input – Output fully Isolation design.
Pass	(e.) High Efficiency	89-90 % High reliability, Robust design.
N/A	(f.) Power saving mode	Low power to conserve energy.
See Report	(g.) Dual - color indicators:	Input voltage, (GRN), Alarm = (RED) on pcb.
Pass	(h.) Circuit protections:	SC, OV, UV, OC, RP, TIP- input protections.
Pass	(i.) Cooling Fans:	Inverter will be designed with (2) cooling fans
Pass	(j.) Remote Control MS- connector:	Remote control on-off function, PIN E to Grd. see drawing
Pass	(k.) Output Connector:	MS 3102A 24-12S connector AC output
Pass	(L.) Input Connector:	MS 3102A 24-12S connector DC input
Pass	(m.) Aluminum Chassis: see drw	Inverter enclosure with front mounting brackets, wholes & slots.
Pass	(n.) Inverter Color:	Color = Gold anodizing, and or iridite per MIL –C-5541 Class1A
Pass	(o.) Inverter Markings:	Label or Silk screening
	2.) SPECIFICATIONS TABLE:	
Pass	(p.) Input Voltage:	28 Vdc (nominal), 20 to 37.5 vdc input range
Pass	(q.) Output Voltage, Waveform, Phase:	PURE SINE WAVE: Single Phase, 115vac
Pass	(r.) Power Output: **500 Watt Model**	110% of rated power for 2 hrs 90% of rated load for 5 (min) at 20vdc input
Pass	(s.) Harmonic Distortion:	.5% (nominal) THD
Pass	(t.) PCB Components:	Pcb components = 50vdc working voltage, high temp 125c
Pass	(u.) Power Factor:	+0.8 to –0.8
Pass	(v.) Response Time:	300uSec (no load to full load)
Pass	(w.) Efficiency:	89-90% PO/PC
Pass	(x.) Regulation:	1% Line, 1% Load, 2.5% Temperature
Pass	(y.) Overload Capacity:	110% of rated power for 2 hours 150% of rated power for 5 min.
Pass	(z.) Protection Circuit:	The inverter will shutdown under the following conditions: • Input voltage > 37.5 Vdc • Input voltage < 20.0 Vdc • Internal high temperature. • Short circuit condition for (1) minute, within (5) minutes after removing SC the inverter shall be re-energized and operated without degradation. • SC, OV, UV, OC, RP. • Safety GFCI Sensor

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Results	Specification cont.	
	(aa.) Input protection:	Transient input protection on input, 100 volts for (1) millisecond.
Pass on @40.5C	(bb.) Cooling Fans: x 2	Thermostatically controlled High reliability brush-less fans (Turn on at 50C) Comair Rotron or equivalent Fan Corp.
	3.) SPECIFICATIONS TABLE: Continue	DO-160G RTCA env.cat. Compliance FAA TSO C73, MPS
Pass	(cc.) Emissions:	EN55022, EN55011 Class B, EN61000-3-3, TSO MPS or equivalent
Pass	(dd.) Reliability:	MTBF: 55,000 hrs.
Pass	(ee.) Dimensions:	See Drawing LS03-06000-07
Pass	(ff.) Temperature:	-55C to 71C, (-65F to + 160F)
Pass	(gg.) Humidity:	95%
Pass	(hh.) Remote on-off	Pin E to Grd. for remote on/off
pass	(ii.) Vibration:	10-55c.p.s. Double Amplitude or greater
pass	(jj.) Parallel Operations:	Parallel between (2) or more units to increase output current.
N/A	(kk.) Dielectric Strength:	The inverter shall withstand, without damage, the application of 1500 volts r.m.s. 60 cycles between winding and frame for (1) minute.
Pass	(ll.) Shock:	(10g), 3 impact to vertical, parallel to major, minor, horizontal axis.
Pass	(mm.) Altitude:	Altitude: Tested to 30k, 24hrs operational, 40k 5 min.
Pass	(nn.) Safety Issues:	Inverter will operate DVD, Cell phones, chargers, LCD monitors, entertainment equipment, household items, food service equipment, etc. Safety is the highest priority so that crewmembers and or passengers on board are not harmed by an ac shock condition. The manufacturer will provide circuitry for GFCI components on the pcb for future population if needed to meet recent FAA AC directives. Manufacturer will provide engineering drawings for a typical installation from the output MS connector to the ac plug, ships power.
Pass	(oo.) Weight:	4.3 lbs.
		Notes: