

Southern Avionics Company

SC1000 DGPS Transmitter

Part Number: SLF30601 SPECIFICATION SHEET

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*Information provided is subject to change without notice

FEATURE	SPECIFICATION
Frequency	283.5 - 325 kHz 5 mW MSK sinewave signal
Power Output	Carrier power into 50 Ohms continuously adjustable from 50 - 1000 W max
Spurious Emission	Less than -70 dBc
Radiated Harmonics	Less than -60 dBc
Type of Emission	NON, G1D
Noise and Hum Level	Less than -40 dB
Input Power	115/230 V +/-10%, single phase 50 - 60 Hz; or 144 VDC or both with switch over to batteries
Nominal AC Input Power	1250 W at 1000 W
Nominal DC Input Power	1150 W at 1000 W
Power Consumption	1200 W for 1000 W RF output
Temperature Range for Working Conditions	-15°C - +55°C
Relative Humidity for Working Conditions	0 - 95%
Metering	Forward power output, reflected power output, PA voltage and PA current
Height	78 in. (198cm)
Length	32 in. (81cm)
Width	23 in. (58cm)
Weight	530 lbs. (240kg)

Application:

The SC1000 transmitter uses switching technology in the power amplifiers and modulator regulator modules resulting in a highly efficient system in a relatively small package. The power portion of each transmitter consists of two independent 1000 Watt systems. Each system has an output filter, a switching power amplifier, and switching modulator/regulator. The RF output of each system is combined to provide a 1000 Watt signal to the Antenna Coupler.

The SC1000 consists of two independent SC1000 transmitters, an Automatic Transfer Unit / RSIM Controller designed to for mounting in a single 19 in. rack cabinet. This control mechanism uses RSIM commands that allow the unit to control up to 24 external devices, through relay contacts, and has the ability of monitoring up to 40 external devices such as intrusion alarms, temperature and humidity sensors. Radio Technical Commission for Maritime Services (RTCM) Standard Integrity Monitor with RS232, RS422, RS485 or Ethernet communications is available. The SC1000 also has the ability to operate with dual antennas and ATUs. This unit works with the PC-1Kilo Antenna Tuning Unit. The minimum antenna requirements for the SC1000 are a 50 ft. (15m) / 60 ft. (18m) / 90 ft. (27m) / 120 ft. (37m) Guyed Mast or a 60 ft. (18m) / 90 ft. (27m) / 120 ft. (37m) Symmetrical "T" Antenna. Meets FCC requirements.