



SC500 DGPS Transmitter

Part Number: SLF30602

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 10 - 500 W max
Spurious Emission	Less than -70 dBc
Radiated Harmonics	Less than -80 dBc
Type of Emission	NON, G1D
Noise and Hum Level	Less than -40 dB
Input Power	230 VAC +/-10%, single phase 50 - 60 Hz; or 144 VDC or both with switch over to batteries
Nominal AC input power	721 W at 500 W output
Nominal DC input power	633 W at 500 W 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	68.2in (173cm) 72in (183cm) with castors
Depth	31.5in (80cm)
Width	21.5in (55cm)
Weight	518lbs (235kg) 601lbs (273kg) with DGPS equipment
Panel height	36U

Application:

The SC500 transmitter uses switching technology in the power amplifiers and modulator circuits resulting in a highly efficient system in a small package. The power portion of each transmitter consists of two independent 500 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 500 Watt signal to the Antenna Tuning Unit.

The SC500 Dual consists of two independent SC500 transmitters and an Automatic Transfer Unit / RSIM Controller designed to mount in a single 19 in. rack cabinet. The controller uses RSIM commands, controls 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. The Controller uses RTCM standard (SC104) message format to communicate with external devices via Ethernet. The SC500 works in conjunction with the PV1000 Antenna Tuning Unit (ATU) to allow operation with the following antennas, 90 ft. (27m) / 145 ft. (43m) Guyed Mast or a 90 ft. (27m) / 120 ft. (36m) Symmetrical "T". The SC500 is designed to meet FCC and CE requirements and comes standard with Automatic Level Control and Remote ATU adjustments to meet SAR and IEEE C95.1 requirements.