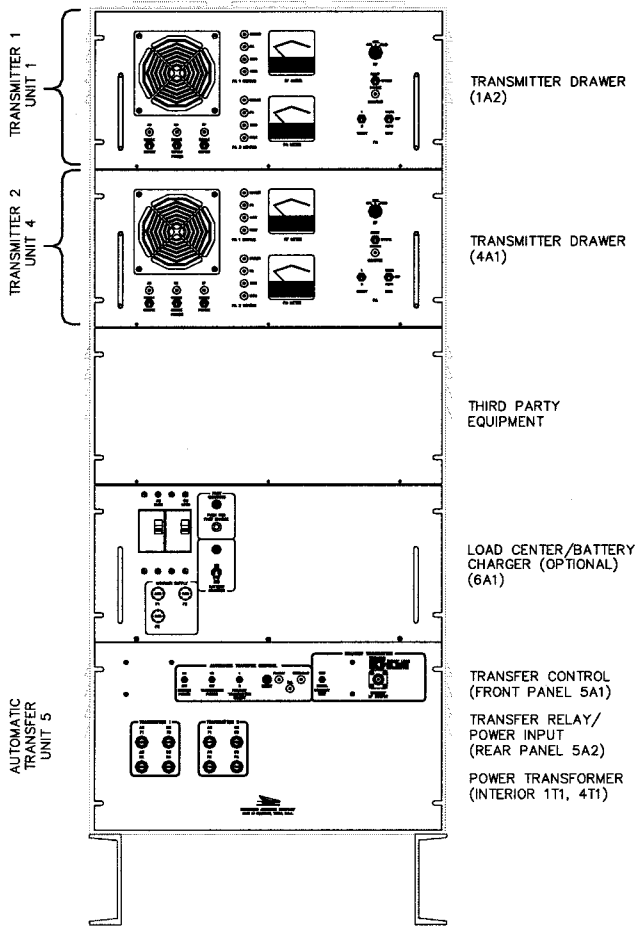
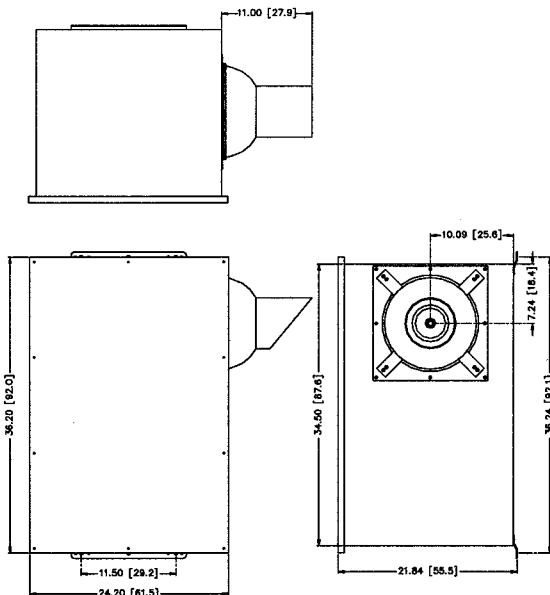




**Southern Avionics®
Company's Marine Band DGPS
Reference Station Transmitter.**



SC1000 DGPS Dual Transmitter



PC1KILO USCG DGPS Antenna Coupler

Model: SC1000

Qualifications: Meets applicable requirements of FCC and USCG.

Frequency Range: 283.5 to 325 kHz.

Power Output: Carrier power into 50 ohms continuously adjustable from 50 to 1000 watts.

Spurious Emission: More than 70dB below the 1000 watt carrier (measured at a dummy antenna).

Radiated Harmonics: More than 60dB below the 1000 watt carrier (measured at a dummy antenna).

Type of Emission: NON, G1D.

Noise and Hum Level: More than 40dB below the 1000 watt carrier.

Input Power: 115/230V $\pm 10\%$, single phase 50 - 60 Hz or 144VDC or both with switch over to batteries. Nominal input power is 1250W at 1000W. Nominal DC input power is 1150W at 1000W carrier.

Metering: Forward power output, reflected power, PA voltage and PA current.

Circuit Protection: Individual fuses are used to protect the AC and DC circuits. A VSWR circuit shuts down the transmitter if VSWR exceeds an adjustable value.

Working Conditions: Continuous unattended operation, -40° to $+70^{\circ}$ C, 0-100% humidity.

Dimensions: 51"H, 20"W and 23"D.

Monitoring: Transmitter shuts down when power falls below an adjustable value, or when VSWR rises above an adjustable value. With a dual system, a shutdown signal initiates a transfer from the primary transmitter to the secondary transmitter.

Model: PC1KILO USCG

INPUT IMPEDANCE: 50 ohms.

LOAD IMPEDANCE: 2 to 25 ohms resistance, 500 to 3500 pF capacitance.

FREQUENCY: 283.5 - 325 KHz with a 500 to 3500 pF load.

POWER INPUT: 1000 watts average, 2000 watts peak.

METERING: Antenna current. Single meter with 4 position switch, OFF, TUNE, 0-20 amps, 0-10 amps.

TUNING: Large coil with coarse taps and fine taps and a rotatable tuning ring. The coarse tap is selected with a solder connection behind an access panel. The fine tap is selected with a 10 position switch. The autotune system drives the tuning ring for exact tuning. Inductance range is 25 μ H to 650 μ H.

WORKING CONDITIONS: Continuous unattended operation in the following environments: ambient temperature, -50° C to $+70^{\circ}$ C; humidity, up to 95%; altitude, up to 4000 meters. The antenna coupler is designed for outdoor installation at the base of the antenna.

POWER REQUIREMENTS: 12 VDC, 500mA, supplied to coupler from Southern Avionics transmitters. Optional 110/220 VAC, 50 - 60 Hz supply for use with other transmitters.

SIZE: 24" (61 cm) wide, 22" (56 cm) deep, and 36" (91 cm) high.

ACCESS: Access to the tuning controls and meter is available behind the weathertight front access door. Access to the coarse taps on the loading coil is available behind a removable panel above the tuning controls panel.