



PC1 Kilo USCG DGPS Antenna Coupler

Model PC1 KILO 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° to +70°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 weather-tight front access door. Access to the coarse taps on the loading coil is available behind a removable panel above the tuning controls panel.

144VDC Load Center/Battery Charger System:

INPUT POWER: 110/220 VAC \pm 15%, single phase 50-60 Hz. Nominal input power is 2000 watts at a 10 amp charge.

CHARGE CURRENT: 10 amp max.

CHARGE VOLTAGE: 165VDC nominal fast charge, 159VDC nominal float charge.

CIRCUIT PROTECTION: The battery charger output is protected by fuses. The battery charger input and transmitter AC/DC are protected by circuit breakers.

WORKING CONDITIONS: Continuous unattended operation in the following environments; ambient temperature, -40° to +70°C; relative humidity, 0-100%.

INSTALLATION REQUIREMENTS: Indoor mounting only.

INDICATORS: Battery charger ON - Green LED. Fast Charge ON - Yellow LED.

METERING: DC Volts, Charge/Discharge Current.

144VDC To 120VAC Inverter:

INPUT POWER: 144VDC.

OUTPUT POWER: 120VAC, 60Hz quasi-sine wave.

CIRCUIT PROTECTION: The AC line fuse is a 15A normal blow type 3AB fuse which protects against load faults appearing on the commercial AC line when it is selected by the inverter's transfer circuitry to power the load.

ALARM CONDITION LED: This LED is "on" when the Form C alarm contacts on the rear panel indicate an alarm condition.

DC INPUT CIRCUIT BREAKER: This is a combination DC input switch and circuit breaker, provided in the positive input line. It does not interrupt the commercial AC line input.