



PCV1000 Antenna Coupler

SC Series Antenna Options

- **Guyed Mast** -- 50 ft/15.2m • 60 ft/18.3m
90 ft/27.4m 120 ft/36.6m • 140 ft/42.7m
- **Symmetrical T** -- 60 ft/18.3m • 90 ft/27.4m
120 ft/36.6m

Field Engineer Services World-wide:

- | | |
|------------------------------|-----------------------|
| On-Site Diagnosis and Repair | Site surveys |
| Maintenance | Range calculations |
| Equipment upgrades | Site Acceptance Tests |
| Installation oversight | Commissioning |

Model PV1000 Antenna Coupler

Input Impedence	50 ohms
Load Impedence	2 to 39 ohms resistance, 300 to 3500 pF capacitance
Frequency	190 to 535 kHz, with a 500 to 3500 pF load
Metering	Up to 1000 watts average, 2000 watts peak
Tuning	Antenna current and tuning. Single meter with 12 position switch. Power, Current, and Voltages measured.
Power Requirement	Large coil with coarse taps and a rotatable series tuning ring controlled by the autotune system
Power Requirement	24 VDC, supplied to coupler from Southern Avionics transmitters. Optional 110/220 VAC, 50 - 60 Hz supply for use with other transmitters
Working Conditions	Continuous unattended operation in the following environments: ambient temperature, -40° to +70°C; 0-100% relative humidity. The antenna coupler is designed for outdoor installation at the base of the antenna.
Size	40" H x 40" W x 23" D (102cm x 102cm x 59cm)
Access	Access to the tuning controls and meter is available behind the weathertight front access door.



SC Series

1000



Southern Avionics Company

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- Fully customizable
- Dual or Single configurations
- Battery standby system
- RSIM/Transfer Control System
- Operation from 283.5 kHz to 325 kHz

Bringing your pilots in safely for more than forty-five years . . .

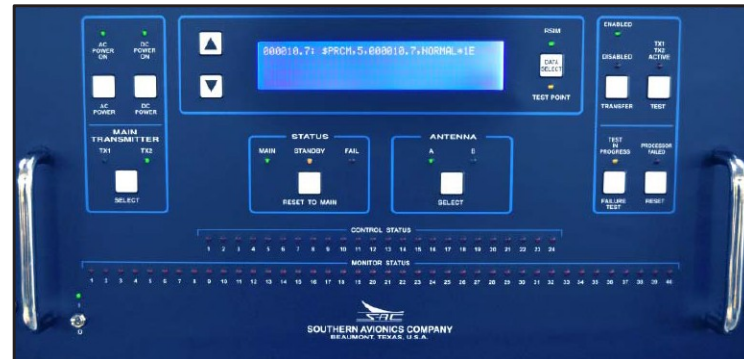
Introducing the NEW SC1000 Transmitter

The **SC1000** is a differential Global Positioning System (DGPS) transmitter with carrier power adjustable from 50 - 1000 Watts. The transmitter uses switching technology in the power amplifiers and modulator/regulator modules resulting in a highly efficient system. The exciter portion consists of an interface for a 283.5 to 325 kHz 5mW MSK sine wave signal.

Each system has output filtering, switching power amplifiers, and switching modulators/regulators. The RF output of each system provides the 1000 Watt signal to the Antenna Tuning Unit (ATU). The **SC1000 Dual** consists of two independent SC1000 transmitters, an automatic transfer unit and RSIM Controller housed in a single cabinet. The RSIM controller provides 24 control and 40 monitor states.

Features

- Universal input power supply
- Integrated switching power inverters
- Front panel LCD
- Ethernet interface for monitoring and control
- Fully shielded RF assemblies
- Coaxial relays for RF transfer
- Sealed membrane keyboard
- CAP 670 compliance
- Renesas microprocessor controller
- Enhanced software
- Reduced overall wiring
- Improved form factor
- User-friendly operability



SAC RSIM



The **SC1000** also has the ability to operate with dual antennas and ATU's. Antenna selection is either done locally or through a RSIM command.

SC1000 Specifications

(Meets applicable requirements of ICAO and FCC.)

Type of Emission	NON, and G1D
Frequency	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 60 dB below the 1000 watt carrier (measured at a dummy antenna)
Modulation	Switching modulator / regulator, 0-95%, internal 400 or 1020 Hz, eight baud Keyer, 7 WPM
Input Power	115/230V +/-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
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
Metering	Forward power output, reflected power, PA voltage and PA current
Working Conditions	Continuous unattended operation, -40° to +70°C, 0-100% humidity Dimensions: 51"H x 20"W x 23"D (129.5cm x 50.8cm x 58.4cm)
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



KONGSBERG

KONGSBERG DRS 500

The KONGSBERG IMS 500 is a DGNSS integrity monitor station designed for permanent installations as a stand-alone system or as part of national or regional GNSS infrastructure systems. The electronic components are built into a 19-inch rack module and all components are fully remotely operated. The software offers full control and overview of configuration and status parameters in an intuitive graphical user interface.

Features and Performance

- RTCM corrections at up to 2Hz on 4 independent ports
- Sub-metre position achievable with high quality roving unit
- RTCM ver. 3.0
- Standard RTCM GPS corrections, type 1, 2, 3, 5, 6, 7, 9, 16, 27
- GPS RTK corrections, RTCM type 18, 19, 20, 21
- GLONASS corrections, RTCM type 31 and 32
- RSIM messages for integrity monitoring
- Full remote control by direct or dial-up connection
- Storage of raw-data for post-processing



Kongsberg DRS 500 component