



PV1000 Antenna Coupler

SC Series Antenna Options

- **Guyed Mast** -- 90 ft (27m), 145 ft (43m)
- **Symmetrical T** -- 90 ft (27m), 120 ft (36m)

Model PV1000 Antenna Coupler

Input Impedance	50 ohms
Load Impedance	2 to 39 ohms resistance, 300 to 3500 pF capacitance
Frequency	190 to 535 kHz, with a 500 to 1500 pF load
Power Input	Up to 1000 watts average, 2000 watts peak
Metering	Antenna current. Single meter with 12 position switch. Power, Current, Voltages
Tuning	Large coil with coarse taps and a rotatable series tuning ring controlled by the autotune system.
Working Conditions	Continuous unattended operation, -40°C to +70°C. 0-100% Relative humidity. Designed to be mounted outdoors at the base of the antenna.
Power Requirements	12 VDC, supplied to coupler from Southern Avionics transmitters. Optional 110/220 VAC, 50 - 60 Hz supply for use with other transmitters.
Access	Access to the tuning controls are available behind the weather tight front access door.
Size	40" H x 40" W x 23" D (102cm x 102cm x 59cm)

Field Engineer Services World-wide:

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



SC500 Series



Southern Avionics Company

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

*Specifications and other information in this brochure are subject to change without notice.

Our products are built on half a century of proven dependability...

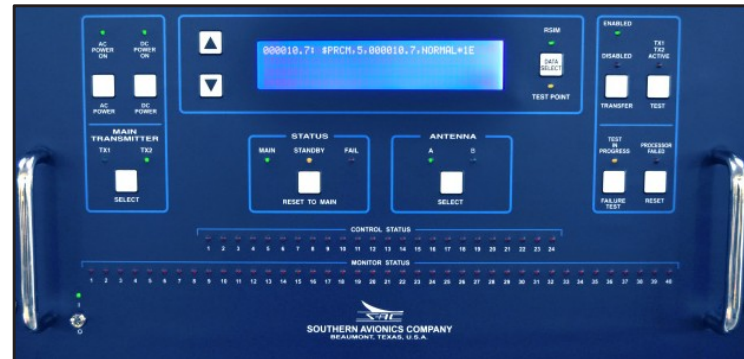
Introducing the NEW SC500 Transmitter

The **SC500** is a differential Global Positioning System (DGPS) transmitter with carrier power adjustable from 50 - 500 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.

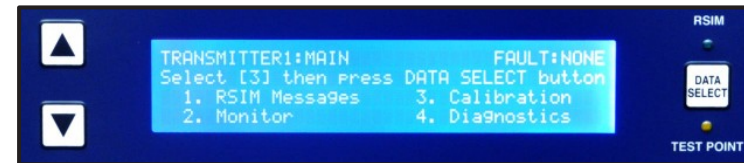
Each system has output filtering, switching power amplifiers, and switching modulators/regulators. The RF output of each system provides the 500 Watt signal to the Antenna Tuning Unit (ATU). The **SC500 Dual** consists of two independent SC500 transmitters, an automatic transfer unit and RSIM Controller 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
- Renesas microprocessor controller
- Enhanced software
- Reduced overall wiring
- Improved form factor
- User-friendly operability



SAC RSIM



The **SC500** also has the ability to operate with dual antennas and ATU's. Antenna selection is either done locally or through a RSIM command.

SC500 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 500 watts
Spurious Emission	More than 70 dB below the 500 watt carrier (measured at a dummy antenna)
Radiated Harmonics	More than 60 dB below the 500 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 AC input power is 625W at 500W output. Nominal DC input power is 575W at 500W output.
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: 23" / 58 cm WIDE • 32" / 81cm DEEP • 78" / 198 cm TALL
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



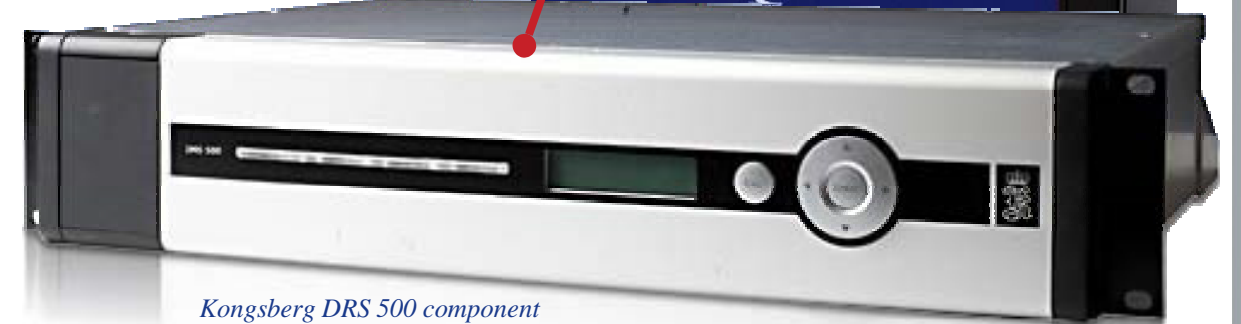
KONGSBERG

KONGSBERG DGNSS Reference Station

DRS 500 and IMS 500 are a new generation of DGNSS reference products. The products feature a new graphical user interface for real time operation and system control. The primary goal of the new HMI is for the operator to identify and react to critical situations effectively and safely. The DRS 500 and IMS 500 are fitted with state-of-the-art GNSS receivers supporting future signals.

Features and Performance

- RTCM corrections at up to 1Hz
- Standard GPS corrections, type 1, 2, 3, 5, 6, 7, 9, 16, 27
- GPS RTK corrections, RTCM type 18, 19, 20, 21 (optional)
- GLONASS corrections, RTCM type 31 and 32 (optional)
- Compliant with: RTCM SC-104 ver. 2.3, RSIM ver. 1.2, IALA recommendation R-121
- RSIM messages for integrity monitoring
- Storage of raw-data for post-processing
- Pre- and post broadcast integrity
- Full remote control by direct or dial-up connection
- HMI based configuration



Kongsberg DRS 500 component

SC500

