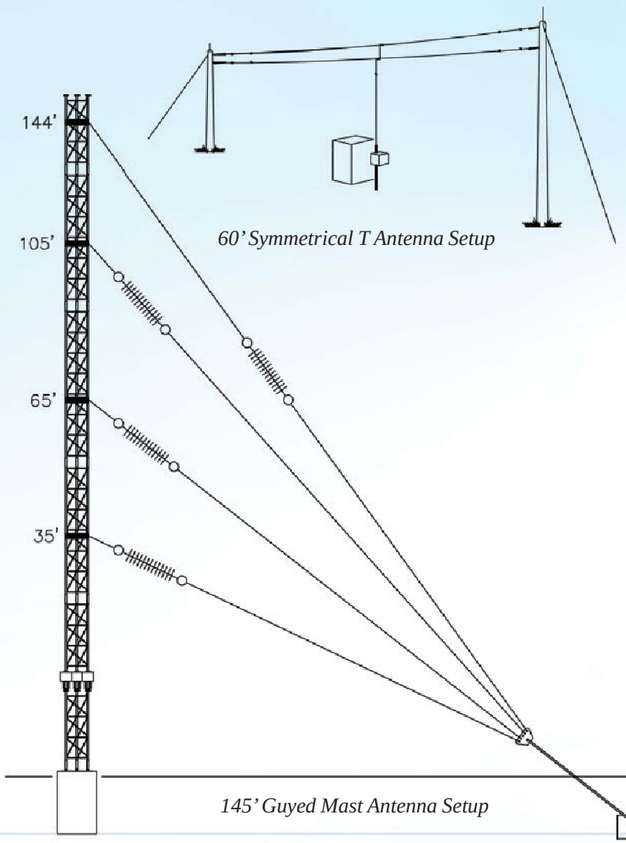
Southern Avionics NDBs are in use by Airports, Civil Aviation Authorities, and Offshore Platforms around the world!

SAC Services:

- Factory Technical Support Team
- Installation & Repair
- Factory or On-site Training Courses
- Site Planning Assistance

SE Series Add-Ons:

- ➔ Remote Control Panel
- ➔ Audio PWB for Voice transmission
- ➔ Monitor/Alarm Receiver with Loop Antenna
- ➔ Battery Charger
- ➔ Test Equipment
- ➔ Anti-Ice Insulator system for Sym “T” Antenna
- ➔ Remote Ethernet access
- ➔ Antenna Coupler
- ➔ Antennas
- ➔ Dummy Load
- ➔ Dummy Antenna



60’ Symmetrical T Antenna Setup

145’ Guyed Mast Antenna Setup

SE500 NDB

SE500 digital NDB

Southern Avionics Company

Southern Avionics Company

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P.O. Box 5345 • Beaumont, TX 77726-5345

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

- **Fully redundant, hot/standby configuration**
- **BITE, DDS, LCD screen, membrane keypad & optional Ethernet interface**
- **Front panel keypad and LCD easily control all operations - no computer required**
- **Ethernet interface option:**
  - ➔ **Allows SE500 to be controlled by a personal computer locally, or remotely**
  - ➔ **Provides operation of the SE500 over LAN or virtually anywhere in the world**
  - ➔ **Contains an embedded web server - no software for the customer to load on their computer**
  - ➔ **Includes IP address and a built-in homepage accessed by simply connecting a PC to the RJ45 jack on the Control Panel**

Due to our 48 years of experience, superior quality products, and commitment to long-term customer satisfaction, ***Southern Avionics*** is recognized as one of the foremost manufacturers of NDB equipment in the world.

SE500 Specifications

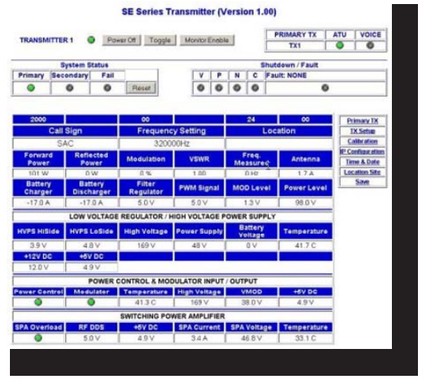
(Meets applicable requirements of ICAO, FCC and FAA.)

Type of Emission	NON, A2A, A3E (Optional) or any combination. GID (with optional GPS beacon modulator)
Frequency	190-535 kHz Synthesized (field programmable), no additional parts needed within the band.
Power Output	50 to 500 Watts
Radiated Harmonics	Radiated harmonics are better than 63 dB below carrier.
Modulation	Switching modulator / regulator, 0-95% modulation, precision DDS 400 or 1020 Hz source, eight baud Keyer with 7 WPM and maximum character length of 8.
Input Power	220 VAC +/- 15%, Power Factor corrected, single phase 47-63 Hz. or optional 144 VDC, or both, with switch over to batteries.
Metering	Power output, reflected power, PA voltage, PA current, percent modulation.
Working Conditions	Continuous unattended operation, -40° to +55°C, 0-100% non-condensing humidity, SE125 is supplied in standard19in rack-mount for indoor installation.
Monitoring	Automatic shutdown if tone, modulation or power drift beyond a user adjustable level. VSWR protection set at 2.62:1.
Dimensions	SE Cabinet Indoor: 40.2" H x 21.3" W x 31.5" D - (102.1cm x 54.1cm x 80cm)

SE500 Antenna Options

- Guyed Mast 90 ft (27.4m), 120 ft (36.6m), 145 ft (44m)
- Symmetrical T long-wire antenna 60 ft (18.3m), 90 ft (27.4m), 120 ft (36.6m)
- Galvanized steel antenna supports for T antennas available from SAC or sourced locally

SE Series Upgrade Options



WEB Watch -NDB Ethernet control and monitoring Web Watch is a system-embedded Web Site providing the user with network access to key system parameters via the NDB system's own Home Web Page including.

- System status at a glance
- Operational control
- Local or Remote Configuration
- DHCP capabilities
- Monitoring Built-lin Test Equipment (B.I.T.E.) parameters

Remote Control Unit (RCU) -An optional Remote Control Unit (RCU) is available which uses phone lines or other carriers that can handle leased line or dial-up modems. The RCU allows full monitoring and basic control of the transmitter.

- All readings at the transmitter are available at the RCU via RS485 at a distance of up to 4,000ft (1,220m).
- Selection of Primary Transmitter can be made and the system can be Powered Up or Down. All Built-In Test Equipment data is displayed on the 40 character by 4 line LCD.
- Indications for Primary, Secondary and Fail are provided, as well as, those for ICAO Annex 10 Chapter 3.4 shutdown requirements.
- Power provided by external 12VDC wall-mounted power supply or customer's 12VDC source.

Extenders:

Ethernet Copper -Extends the Ethernet remote up to 1 mile (1.6 km) away using a conventional copper pair. Copper Ethernet converters are required at each end.

Ethernet Fiber -Extends Ethernet Capability up to 1.2 miles (1.9 km) in multi Mode Fiber or up to 12.4 miles (20 km) in Single mode fiber. Fiber Interface is required at both ends.

Serial Fiber -Extends the RS485 port on the SE up to 2.5 miles (4 km) for RCU operation.

PV1000 Coupler

PV1000 Antenna Coupler Specifications

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.
Power Input	Up to 2000 Watts peak, 1000 Watts average.
Coupler Switch	Transmitter On/Off control for single person set-up.
Metering	Antenna current and tuning. Single meter with twelve position switch. Power, Current, and Voltage measured
Tuning	Large coil with coarse taps, and a rotating series ring controlled by the autotune system.
Lightning Protection	Lightning gap at the antenna terminal. Special passive circuit that protects the transmitter final amplifier from lightning transients.
Working Conditions	Continuous unattended operation, -40°C to +70°C, 0 to 100% relative humidity. Designed to be mounted at base of antenna.
Dimensions	40" H x 40" W x 23" D (102cm x 102cm x 59cm)
Electrical Connections	RF Input via an "N" type connector located on the bottom of the cabinet. Coupler control wire connections a cable gland on the coupler right side. Antenna connection via a 1/4in threaded stud.

SE500