

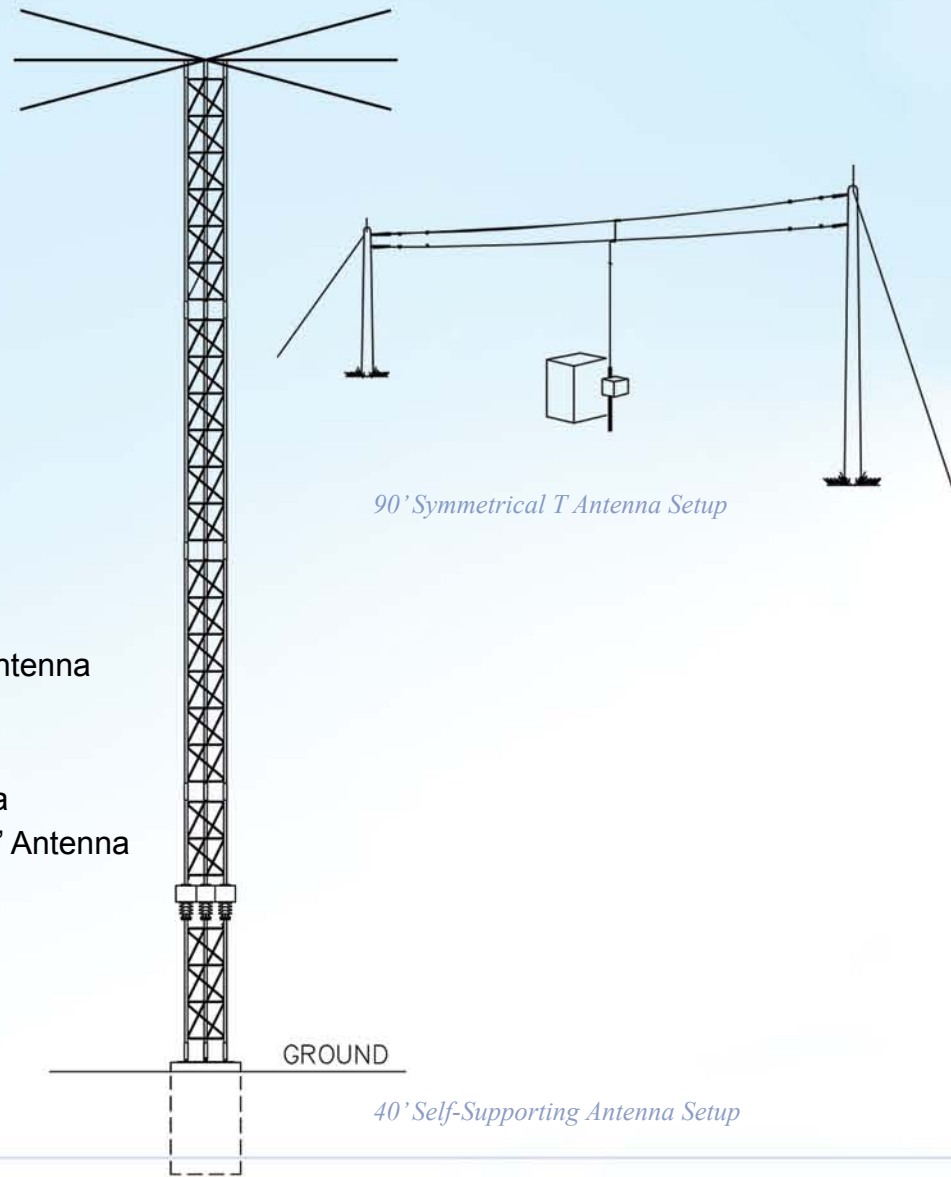
Southern Avionics NDBs are in use by Airports, Civil Aviation Authorities, and Offshore Platforms around the world!

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
- CAP 437 Compliant Helipad Antenna
- Anti-Ice Insulator system for Sym "T" Antenna
- Remote Ethernet access
- Antenna Coupler
- Antennas
- Dummy Load
- Dummy Antenna



SE250 NDB



SE250 digital NDB



Southern Avionics Company

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- 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 SE250 to be controlled by a personal computer locally, or remotely
 - Provides operation of the SE250 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.



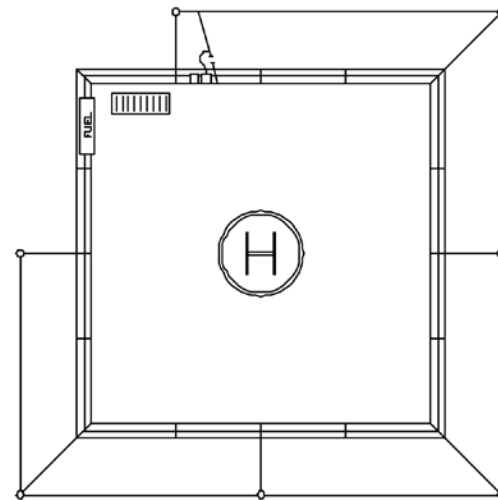
SE250 Specifications

(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	190-650 kHz Synthesized (field programmable), no additional parts needed within the band. (optionally 190 to 1800 kHz in three system bands: 190-650, 650 to 1250, and 1500 to 1800 kHz).
Power Output	10 to 250 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	100-264 VAC, Power Factor corrected, single phase 47-63 Hz. or optional 48 VDC, or both, with switch over to batteries. Nominal input power is 660 Watts at 250 Watts Carrier in Continuous Mode at 100% modulation.
Metering	Power output, reflected power, PA voltage, PA current, percent modulation.
Working Conditions	Continuous unattended operation, -40° to +70°C, 0-100% non-condensing humidity, SE250 is supplied in standard 19in 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	41" H x 21" W x 24.5" D (104cm x 54cm x 62cm)

SE250 Antenna Options

- Helipad long-wire antenna for offshore applications
- Guyed Mast 90ft (27.4m), 120ft (36.6m), 145ft (44m)
- Self-Supporting 40ft (12m) Mast
- 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

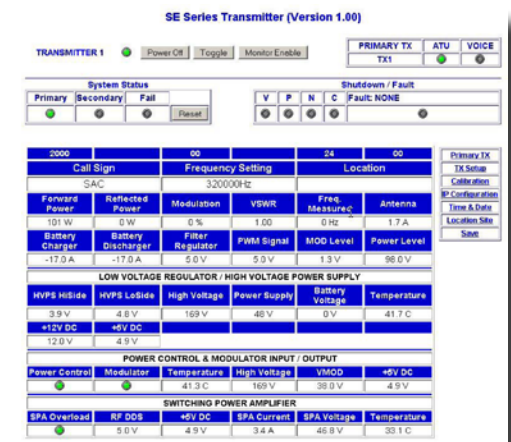


Helipad long-wire antenna

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-in 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 RS232 / RS485 port on the SE up to 2.5 miles (4 km).

PC3000 Antenna Coupler Specifications

Input Impedance	50 Ohms
Load Impedance	2 to 25 Ohms resistance, 700 to 1500 pF capacitance.
Frequency	190 to 625 kHz with a 700 to 1500 pF load.
Power Input	Up to 1500 Watts peak, 600 Watts continuous.
Coupler Switch	Transmitter On/Off control for single person set-up.
Metering	Antenna current and tuning. Single meter with four position switch for OFF, TUNE, HIGH and LOW tuning.
Tuning	Large coil with coarse taps, fine taps and a rotating shorted 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, -50% to 70C, 0 to 100% humidity; high salinity as encountered in offshore conditions. Designed to be mounted at base of antenna.
Dimensions	26.5" H x 22.5" W x 21.5" D (67cm x 57cm x 55cm)
Electrical Connections	Rf Input via an "N" type connector located on the bottom left-side of cabinet. Coupler control wire connections via a flexible conduit on the coupler bottom, Antenna connection to 1/4in (0.64cm) threaded rod in antenna feed-through bushing.



PC3000 Coupler