

# Land SE250 Rack Mount Dual NDB System



## SE250 RACK MOUNT DUAL TRANSMITTER

25 TO 250 WATTS CARRIER POWER, FULLY REDUNDANT DUAL HOT/STANDBY CONFIGURATION WITH AUTO-TRANSFER CIRCUIT, SUPPLIED IN IP66 CERTIFIED ENCLOSURE.

- BITE, DDS, AND 40 CHARACTER X 4 LINE LCD SCREEN
- ALL OPERATIONS CAN BE CONTROLLED BY FRONT PANEL KEYPAD
- MEETS CAP670 REQUIREMENTS
- ANATEL AND CE COMPLIANT
- ANALOG & DIGITAL METERING
- 190-535 KHZ OPERATION
- INPUT POWER 100-260VAC OR 48VDC
- SET OF TECHNICAL HANDBOOKS
- BUILT-IN ETHERNET INTERFACE
- WEB WATCH HOMEPAGE USING YOUR ASSIGNED IP ADDRESS ALLOWS THE SE125 TO BE CONTROLLED & MONITORED LOCALLY & REMOTELY BY ANY ETHERNET-CONNECTED PC.
- WEB SERVER IS EMBEDDED SO THERE IS NO SOFTWARE TO LOAD.

## SYMMETRICAL "T" ANTENNA

LONGWIRE ANTENNA WITH OVERHEAD CAPACITIVE LOADING, DOWN LEAD RADIATOR & INSULATORS, 12 RADIAL GROUND COUNTERPOISE SYSTEM. ANTENNA SUPPORT TOWERS PRICED SEPARATELY OR MAY BE SOURCED LOCALLY.

## PC-3000 ANTENNA TUNING UNIT (ATU)

PROVIDES OPTIMUM MATCHING OF SE250 OUTPUT SIGNAL & 700-1500PF / 2-30 OHMS ANTENNA LOAD.

- 190-1800 KHZ OPERATION
- SUPPLIED IN IP66 CERTIFIED, WEATHERPROOF ENCLOSURE.

## INSTALLATION AND COMMISSIONING

PERFORMED BY FACTORY AUTHORIZED FIELD TECHNICIAN. PRICING IS FOR 2 DAYS ON-SITE WITH 2 DAYS TRAVEL TIME BETWEEN MONDAY – FRIDAY. WEEKEND AND US PUBLIC HOLIDAYS ARE AT A PREMIUM RATE. STANDARD WORK DAY IS FROM MONDAY – FRIDAY 0800 – 1700, WITH A 1 HOUR BREAK FOR LUNCH. TRAVEL EXPENSES INCLUDED. PRE-PAID ON-SITE DAYS THAT ARE NOT USED WILL BE REFUNDED. ADDITIONAL DAYS ON SITE WILL BE BILLED AT \$1,900/DAY.

## MR-5 MONITOR ALARM/RECEIVER

PROVIDES "OFF THE AIR" MONITORING OF THE NDB SIGNAL.

- 190 TO 650 KHZ OPERATION IN 5 BANDS.
- INCLUDES LOOP ANTENNA & MOUNTING BRACKET.
- DESKTOP CONSOLE OR 19 INCH RACK MOUNT CONFIGURATION.
- COMPLIES WITH APPLICABLE U.S. FCC AND ICAO ANNEX 10 REQUIREMENTS.
- GREEN LAMP INDICATION FOR NORMAL OPERATION.
- RED LAMP & AUDIBLE ALARM ACTIVATE UPON THE FOLLOWING DETECTED CONDITIONS:
  1. REDUCED CARRIER LEVEL (ADJUSTABLE)
  2. REDUCED MODULATION LEVEL (MORE THAN 3 DB)
  3. CONTINUOUS TONE MODULATION
  4. FREQUENCY DRIFT (MORE THAN 2 KHZ)

## RECOMMENDED SPARE PARTS FOR SE250 AND PC-3000 ATU

PRINTED CIRCUIT BOARDS, MODULES AND COMPONENTS FOR RAPID FIELD REPAIR OF THE SE250 NDB AND PC3000 ATU.

## REMOTE CONTROL UNIT (RCU)

19 INCH PANEL-MOUNT RCU PROVIDES FULL MONITORING AND BASIC CONTROL OF THE SE250.

- FULL COMPLIANCE WITH ICAO ANNEX 10, CHAPTER 3.4 SHUTDOWN REQUIREMENTS.
- ALL READINGS AT THE SE250 ARE AVAILABLE AT THE RCU VIA RS485 UP TO 4000 FT (1220M) AWAY.
- FIBER CONNECTIONS AVAILABLE
- PRIMARY TRANSMITTER CAN BE ASSIGNED.
- SE250 CAN BE POWERED UP OR DOWN.
- ALL BITE DATA IS DISPLAYED ON THE 40 CHARACTER BY 4 LINE LCD.
- INDICATIONS FOR PRIMARY, SECONDARY AND FAIL ARE PROVIDED

# Land SE250 Rack Mount Dual NDB System

## Safety and Reliability

The SE250 transmitter has a front panel LED, BITE and keypad which greatly simplifies set up, operation and fault detection. Our products are also ICAO compliant.

Using an Ethernet connection to the built in Ethernet Interface in the SE250, the user has complete control of the SE transmitter. In addition, a personal computer (PC) running an Internet Browser and connected to the Transmitter's IP address can communicate with, configure, and monitor the system.

The SE250 Dual system consists of two fully redundant transmitters in hot/standby configuration with auto-transfer circuit. This design immediately transfers power to the secondary transmitter in the event the primary transmitter encounters a fault. Hot/standby availability significantly improves signal availability and minimizes downtime.

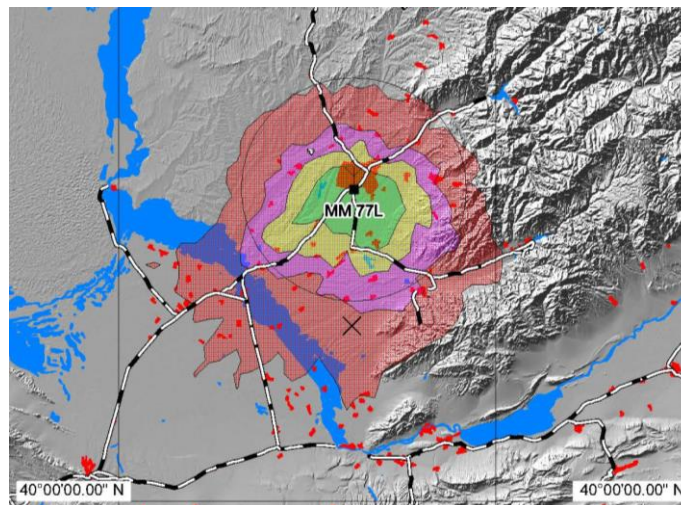
We offer a number of fiber and Ethernet connections to meet any site requirement and to optimize the utility of the SE250 NDB in your application.

## Don't Worry, We Will Setup Your System

Installation can be a long process, especially if you have a new system. Our field technicians have all the necessary certifications to come out to your offshore site and install your NDB system. We won't leave until we have certified it is fully operational and optimized for performance. This is also a good opportunity for your staff to ask questions about control, monitoring and basic operation.

**Over 53 years of experience and expertise with Southern Avionics Company**

Range is important. Give us your site details and we will produce a custom report giving you accurate range information for your system. You will know exactly how far out you can be found.



**Southern Avionics Company**



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# System Overview

## Custom Solutions. Standard Quality.

We always consult with you to find the best solution for your site. Every site has different requirements and challenges. Our experts will recommend to correct equipment up front. No hidden costs or additions.

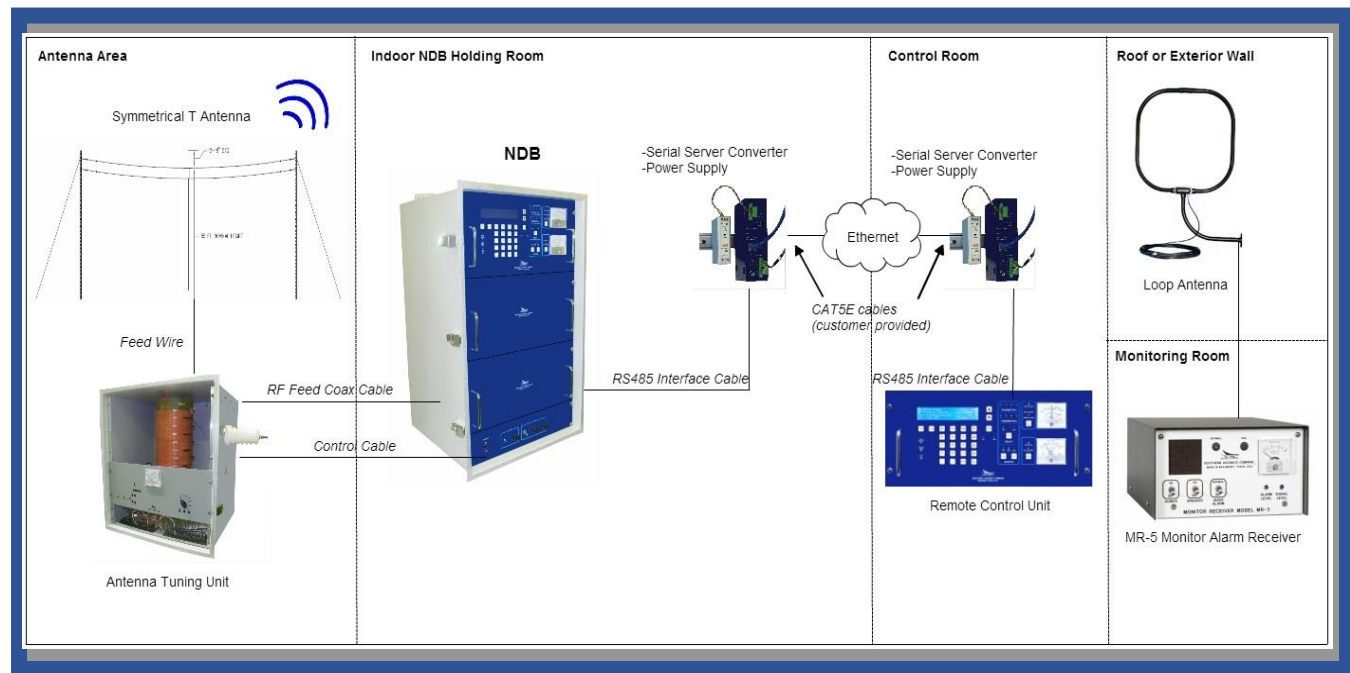
Southern Avionics Company is up-to-date on the industry's regulations and we make sure we comply and exceed those requirements. We have global experience that enables us to provide the best solutions to ensure uninterrupted performance.

## Spares and Test Equipment

Spares kits and Test Equipment will save time and money on repairs. The spares provided are purchased at today's price (versus a future, inflated price). They are readily available to be installed (versus sending back old parts and receiving new ones). That means less down time for the transmitter and less money for repairs. Field Repair Kits purchased now give you an ability to extend the life of their transmitter by replacing key components before or at the time they fail.

## Be Prepared. Invest in Safety.

- SE250 Rack Mount Dual Transmitter
- Antenna: Symmetrical "T" / Mast / Whip
- PC3000 Antenna Tuning Unit (ATU)
- MR-5 Monitor Alarm / Receiver
- SE250 Field Repair Kit
- Remote Control Unit (RCU)
- Installation and Commissioning



Here's an example of a complete NDB System at your airport or landing strip.

## Control and Monitor.

Southern Avionics' NDB SE transmitters can be fully monitored and partially controlled by Web Watch. A server or user-definable IP address is accessible by a local PC or an Ethernet connection. Web Watch utilizes the NDB's embedded web server so there is no additional software to load. There are several Web Watch connection options, each of which are always customized for you solution. All transmitter functions are accessible either by PC or laptop.

SE transmitters can also be fully monitored and partially controlled by the Remote Control Unit. There are several remote connection options, each of which are always customized for you solution. The Remote Control Unit can also be used in conjunction with our Web Watch software. This enables you to fully monitor and operate your system from virtually anywhere.

Version 3.01 of the Web Watch SE Series NDB software provides vast improvements over earlier versions. Our improvements include the addition of Syslog capabilities for logging historical system functions, API (Application Protocol Interface) capabilities, password security and SSL (security certificate) capabilities.

