

Southern Avionics Company

SE125 NDB Dual Transmitter: in Stainless Steel Enclosure

Part Number: SLF33400/SS SPECIFICATION SHEET

5055 Belmont, Beaumont, TX 77707 Phone +409.842.1717 Fax +409.842.2987 sales@southernavionics.com



Application:

The SE Series NDB Transmitter uses state of the art technology including a powerful Renesas© Microcontrollers and Analog Devices© Direct Digital Synthesizers to provide accurate beacon signals in power levels ranging from 10 Watts to 125 Watts carrier power.

The SE unit provides simplified set-up & maintenance procedures, comprehensive BITE, and full Ethernet capability accessible by both internal and external RJ45 connections. Connect directly from the transmitter to PC or through any of our other connection options (see page 2).

The SE125 comes with built in WebWatch software. WebWatch enables the user to control and monitor the transmitter on a laptop or PC. DHCP provides or the user enters an IP address to access WebWatch using any Ethernet/Internet connection.

FEATURE	SPECIFICATION
Frequency	190-650 kHz digitally synthesized (Optionally 650-1250, 1500-1800 kHz)
Frequency Tolerance	1ppm TCXO Oscillator
Power Output	10 - 125 Watts
Noise and Hum Levels	More than 40 dB below 95% modulation
Spurious Emission	More than 64 dB below the carrier level
Type of Emission	NON, A2A, A3E (Optional)
Modulation	Switching modulator/regulator, 0-95%, internal 400 or 1020 Hz, 4-16 baud Keyer, 8 character Identifier max length
Input Power	100 - 264 VAC, 47 - 63 Hz; or 48 VDC or both VAC and VDC with switch over to batteries
Antenna Connection	Type-N female output
Display	40 character by 4 line LCD
Metering	Power output, reflected power, percent modulation, PA voltage, PA current
Monitoring	Firmware will shutdown the primary TX and initiate a secondary TX under the following: loss of tone, continuous tone, reduced modulation level, reduced power output below 3dB, increased power output above 120%, VSWR rise above a preset level, loss of heartbeat pulse from Renesas processor, incorrect Morse code identification
Interface	Barrier block connector for user selectable RS232/RS485 for Remote Control Unit. RJ45 Ethernet Connection
Working Conditions	-40°C - +55°C, 99% Relative Humidity (Non- Condensing)
Storage Temperature	-50°C - +70°C; 0 - 99% Relative Humidity (Non-Condensing)
Height	30 in. (76cm)
Depth	18 in. (45cm)
Width	21 in. (54cm)
Weight	99 lbs. (45kg)
Optional Equipment	Solar Shield, 100 Watt Heater, Audio Interface, Spare parts, Timer Status, Transient and Surge Protection, Internal/External 50 Ohm loads

*Information provided is subject to change without notice



Ethernet Monitoring and Control Options Include (All Ethernet options utilize the WebWatch Software):

- Leased line Modem up to 12 miles (20km) (P/N SLF83301)
- Ethernet Fiber Extension: Up to 1.2 miles
 (1.9km) for multi-mode (P/N SLF83308) and
 12.4 miles (20km) in single mode
 (P/N SLF83303)
- Ethernet Radio Link: utilizes IP67 transceiver and 5.8 GHz planar antenna to allow WebWatch monitoring up to 7 miles (11km) away. (P/N SLF83304)
- Ethernet Land Line Dial-Up: allows access of Ethernet network from any remote location over standard telephone lines. (P/N SLF83314)
- Ethernet Extender: allows extension of Ethernet communication network via a RJ11 terminate TELCO Network cable

The SE125 IP66 Transmitter comes standard with an internal 5 Port Switch. There are two access points to the Switch. The first is a convenient external RJ45 port located on the front of the transmitter. The second is weather-proof access hole through the bottom of the transmitter. All 5 ports can be accessed here, once inside the unit.

Using the External RJ45 port, a user can connect a laptop or PC directly to the transmitter's switch. This gives access to our built-in WebWatch monitoring and control software. When connected to a network, the user can also directly connect to the unit for Internet access. This can be used to send a receive emails to the SAC tech department with troubleshooting questions or any other web functions.

The 5 Port Switch can be used to connect to a WiFi Network, Land Line Network, or any of our Ethernet Control and Monitoring Options or Remote Control Unit Connection Options.



Remote Control Unit Options Include:

- Remote Control Unit: Up to 4000 ft. via RS485 for full monitoring with basic controls. (P/N SLF33090)
- Remote Control Over Ethernet Radio Link: Combines both RCU and WebWatch Monitoring and Control; Up to 7 miles (11km) away (P/N SLF83323)
- RS485 to ST MM Fiber Converter: connect RCU to unit over Multi Mode Fiber; Up to 1.3 miles (2km) away (P/N SLF83319)
- RS485/RS232 to Ethernet Serial: allows monitoring and partial control via RCU using user's LAN
- (P/N SLF83322)

Internal View of 5 Port Switch

