

Southern Avionics Company

SPECIFICATION SHEET

SE250 NDB Transmitter - Rack Mount

Part Number: SLF33030

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19 in. (48cm) Rack Cabinet

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 25 Watts to 250 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 SE250 comes with built in Webwatch software. Webwatch enables the user to control and monitor the transmitter on a laptop or PC. SAC provides the user with an IP address to access Webwatch using any Internet connection.

FEATURE	SPECIFICATION
Frequency	190-535 kHz, continuously variable
Frequency Tolerance	1ppm TCXO Oscillator
Power Output	25 - 250 Watts RF Amplitude Modulated 0-95%
Noise and Hum Levels	More than 40 dB below 95% modulation
Spurious Emission	More than 70 dB below the carrier level
Type of Emission	NON, A2A, A3E, Morse Code
Modulation	Switching modulator/regulator, 0-95%, internal 400 or 1020 Hz, eight baud Keyer, 8 character Identifier max length
Input Power	110 - 264 VAC ± 15%, 47 - 63 Hz; 48VDC
Antenna Connection	Type-N female output
Display	40 character by 4 line LCD
Metering	Forward and reflected power, modulation percentage, final PA voltage and 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 AC/DC voltage, antenna tuning unit and remote control unit (RCU); user selectable RS232/RS485 for RCU
Working Conditions	-20°C - +55°C, 0 - 100% relative humidity
Height	41 in. (102cm)
Depth	25 in. (63cm)
Width	21 in. (54cm)
Weight	173 lbs. (78kg)

*Information provided is subject to change without notice



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

- Ethernet Copper Extender: extend up to 1 mile (1.6km) (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 RJ-11 terminate TELCO Network cable (P/N SLF83315)



Remote Control Unit Options Include:

- Remote Control Unit: Up to 4000 ft. via RS-485 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 Fiver 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*)

The SE250 Rack Mount Transmitter comes standard with an internal 5 Port Switch. There are two access points to the Switch. The RJ45 ports are located on the front and back of the transmitter. All 5 ports can be accessed 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.



Front View



Back View