

Southern Avionics Company

SE1000 NDB Transmitter

Part Number: SLF35002 SPECIFICATION SHEET

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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 100 Watts to 1000 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 SE1000 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 synthesized
Frequency Tolerance	1 ppm TCXO Oscillator standard
Power Output	100 - 1000 Watts
Power Amplification	Class D using power MOSFETS
Input Power	230VAC ± 15%, 47 - 63 Hz, or 144VDC
Noise and Hum Levels	More than 40 dB below 95% modulation
Spurious Emission	More than 70 dB below the carrier level with coupler
Type of Emission	NON, A2A, A3E
Modulation	Switching modulator/regulator, 0-95%, internal 400 or 1020 Hz, eight baud Keyer, 8 character Identifier max length
Audio Line Input	Balanced, 600 Ohms, -25 to 0 dBm
Audio Distortion	Less than 1% @ 95%
Antenna Connection	Type-N female output
Display	40 character by 4 line LCD
Metering	Dual front panel analog meters for forward and reflected power, modulation percentage, final PA voltage and current
Monitoring	Automatic transfer to secondary transmitter if tone, modulation, power or VSWR drift beyond a preset level
Interface	Barrier Block connections for AC/DC Voltage, ATU and Remote Control Unit (RS-232 or RS-485 for RCU communications)
Working Conditions	-40°C - +55°C, 0 - 100% Humidity, non-condensing
Height	68 in. (173cm)
Depth	32 in. (80cm)
Width	21 in. (54cm)

*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)



New Front Door Design



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 SE1000 Rack Mount Transmitter comes standard with an internal 5 Port Switch. There is an access point to the Switch. The RJ45 port is located on the 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.

Rear View

