

Southern Avionics Company

Transportable NDB System

Part Number: SLF33800 SPECIFICATION SHEET

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Application:

The Transportable NDB System is designed for simplicity in transportation, quick installation, and minimum space and operational requirements. It is also designed to meet CE requirements.

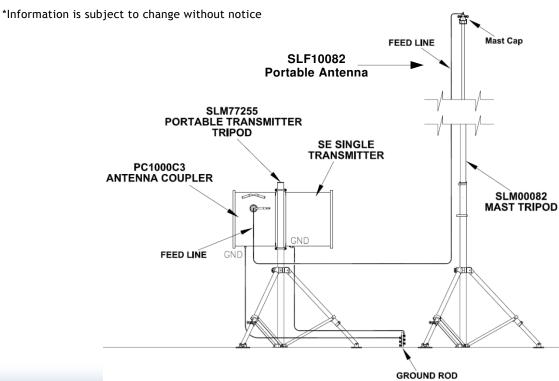
<u>Uses include:</u> Temporary installations at austere landing zones. The system is utilized while erecting new or replacing old NDB systems.

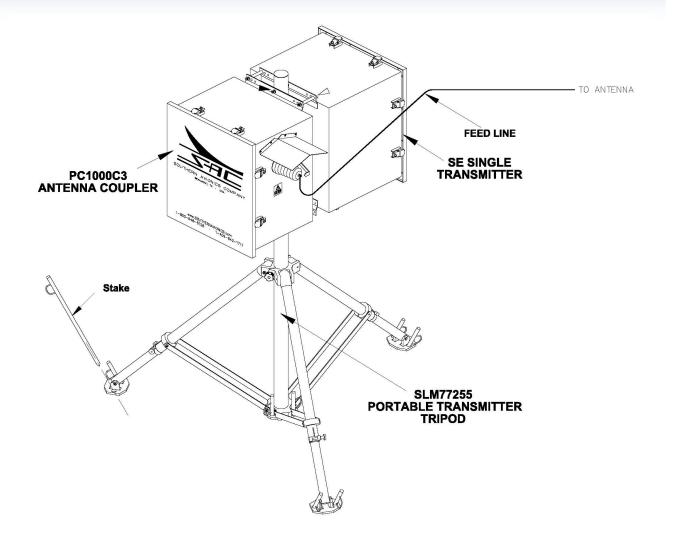
Characteristics:

The system consists of 2 sub-assemblies:

- Portable Antenna
- Portable NDB (SE125 transmitter) and ATU (PC1000C/3 coupler)

Both assemblies are compact and designed for easy use. The antenna can be folded down into a single carrier. The NDB and ATU are mounted on a portable tripod. This creates a system that is easy to transport and user friendly.





Installation:

The system can be assembled in its entirety by 2 men in two (2) hours. The radiators and guy wires are attached to the antenna then the antenna is telescoped vertically into position. The tripod assemblies for the Antenna and Transmitter/ATU are identical for ease of installation and minimizing spare parts inventory.

Ensure a flat area is selected for installation. The amount of available ground space required for full assembly is a circle with a diameter of 72ft (22m). The Antenna, Transmitter and ATU are colocated to minimize required space.

<u>Tripod:</u> Stabilized with 18in (46cm) steel stakes. All stainless steel hardware is included.

Monitoring: All ICAO Annex 10 Ch. 3.4 monitoring is present in a succinct package.

Power: A fully modulated 125 Watt carrier is available from 190KHz to 1250KHz.

SE125 NDB Single Transmitter: IP66 Enclosure Part Number: SLF33300



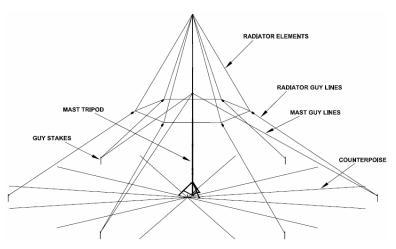
FEATURE	SPECIFICATION
Frequency	190-1250 kHz digitally synthesized (Filter bands are 190-650 and 650-1250)
Frequency Tolerance	5ppm TCXO Oscillator standard (Optional 1ppm TCXO)
Power Output	10 - 125 Watts
Noise and Hum Levels	More than 40 dB below the carrier level
Spurious Emission	More than 65 dB below the carrier level
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
Input Power	100 - 264 VAC, single phase 47 - 63 Hz; Optional 48 VDC or both 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	Automatic shutdown if tone, modulation, power or VSWR drift beyond a preset level (with dual, it transfers to secondary transmitter)
Interface	Barrier block connector for user selectable RS232/RS485 for Remote Control Unit. Optional RJ-45 Ethernet Connection
Working Conditions	-40°C - +55°C, 0 - 95% Humidity
Height	24 in. (61cm)
Depth	18 in. (45cm)
Width	21 in. (54cm)
Weight	59 lbs. (27kg)

PC-1000C/3 Antenna Coupler Part Number: SLF20050/C3



FEATURE	SPECIFICATION
Input Impedance	50 Ohms
Load Impedance	2-30 Ohms resistance
Frequency	190-1250kHz with a 330pF load
Power Input	Up to 500W, 200W continuous
Operating Conditions	-50°C-+70°C; relative humidity 0- 100%; high salinity for offshore; IP66 certified
Height	23in / 58cm
Length	17in / 42cm
Width	21in / 54cm
Weight	42lbs / 19kg
Power Requirements	DC control voltage (SAC transmitter)
Optional Equipment	115/230VAC Internal Power Supply
Connection	Type-N

Portable Antenna Part Number: SLF10082



FEATURE	SPECIFICATION
Frequency Range	190 kHz - 1250 kHz
Power Rating	400 W PEP
Capacitance	330 pF
Resistance	10 Ohms
Height	36 ft. (11m)
Weight (Packed)	85 lbs. (38.5kg)

Transportation:

The Antenna tripod is contained in a duplicate easily transportable case also used for the ATU and NDB tripod. Two small cargo bags are also included for the guy lines and radiator elements. These include all the necessary equipment for installation.

The sub-assemblies included are:

- Mast Tripod (P/N: SLM77255)
- Mast Guy line
- Radiator Elements

The NDB and ATU each have a case of their own. Units are easily attached to the portable tripod on site. The NDB and ATU's tripod is transported in a case identical to the antenna's.

NDB case:

- SE125 Single Transmitter in IP66 rated enclosure
- 3 filters (1-in the transmitter, 2 in the case) for ease of changing frequency
- Transmitter and ATU interconnecting cables

ATU case:

- PC1000C3 Antenna Tuning Unit in IP66 rated enclosure
- · Teflon RF Insulator, RF Insulator Rain Shield
- 9 18in (46cm) stakes, 3lbs (1.4kg) hammer

Transportation:

NDB and ATU

ATU Case

Height: 27 in. (69cm)Width: 28.3 in. (72cm)Length: 35.3 in. (90cm)

• Filled Weight: 109 lbs. (50kg)

NDB Case

Height: 27 in. (69cm)Width: 28.3 in. (72cm)Length: 35.3 in. (90cm)

• Filled Weight: 116 lbs. (53kg)







Tripod Case

Height: 77 in. (196cm)Diameter: 10 in. (25cm)Filled Weight: 25 lbs. (11kg)

Transportation: Portable Antenna



Portable Antenna Case (1)

Height: 77 in. (196cm)Diameter: 10 in. (25cm)Filled Weight: 85 lbs. (39kg)

Includes 2 Portable
Antenna Cargo Bags



