



Southern Avionics Company

Ethernet Connection Options

SPECIFICATION SHEET

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SE125 NDB
Transmitter

Application:

Ethernet Control and Monitoring is available for all SAC Transmitters. Our local and remote controlling options are easy to set up and even easier to use. The most convenient and efficient option is our Web Watch program. All transmitter functions are accessible either by PC or remote control. A server or user-definable IP address is accessible by a local PC or an Ethernet connection. The transmitters are supplied with an embedded web server so there is no additional software to load. We have several connection options to fit your project's needs.

*Information provided is subject to change without notice

SOUTHERN AVIONICS COMPANY 
MANUFACTURERS OF LOW FREQUENCY RADIOBEACONS AND ASSOCIATED PRODUCTS

SE Series Transmitter (Version 1.00)

TRANSMITTER 1 ☒ Power Off

System Status			Shutdown / Fault	
Primary	Secondary	Fault	V	P
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="button" value="Reset"/>			Fault: NONE	

2000		00		24		00	
Call Sign		Frequency Setting		Location			
SAC		320000Hz					
Forward Power	Reflected Power	Modulation	VSWR	Freq. Measured	Antenna		
101 W	0 W	0 %	1.00	0 Hz	1.7 A		
Battery Charger	Battery Discharger	Filter Regulator	PWM Signal	MOD Level	Power Level		
-17.0 A	-17.0 A	5.0 V	5.0 V	1.3 V	98.0 V		

LOW VOLTAGE REGULATOR / HIGH VOLTAGE POWER SUPPLY

HVPS HiSide	HVPS LoSide	High Voltage	Power Supply	Battery Voltage	Temperature
3.9 V	4.8 V	169 V	48 V	0 V	41.7 C
+12V DC	+5V DC				
12.0 V	4.9 V				

POWER CONTROL & MODULATOR INPUT / OUTPUT

Power Control	Modulator	Temperature	High Voltage	VMOD	+5V DC
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	41.3 C	169 V	38.0 V	4.9 V

SWITCHING POWER AMPLIFIER

SPA Overload	RF DDS	+5V DC	SPA Current	SPA Voltage	Temperature
<input checked="" type="checkbox"/>	5.0 V	4.9 V	3.4 A	46.8 V	33.1 C

Primary TX
☒ TX1 ☒ ATU ☐ VOICE

Web Watch Control Program Software

Web Watch Network Requirements:

- Desktop or laptop personal computer (PC) running Vista, XP or Windows 7
- Operating System: Microsoft Windows
- Mouse or touchpad
- Network IP capability
- Ethernet cable

Ethernet Radio Link

The Ethernet Radio Link is an IP67 rated Industrial Wireless Radio equipped with an Ethernet bridge allowing the connection of the transmitter's Ethernet port over a wireless radio medium to a distant Ethernet ready computer or LAN.

The wireless transceivers must be the same model at both NDB and remote sites to allow communication of data over this wireless link.

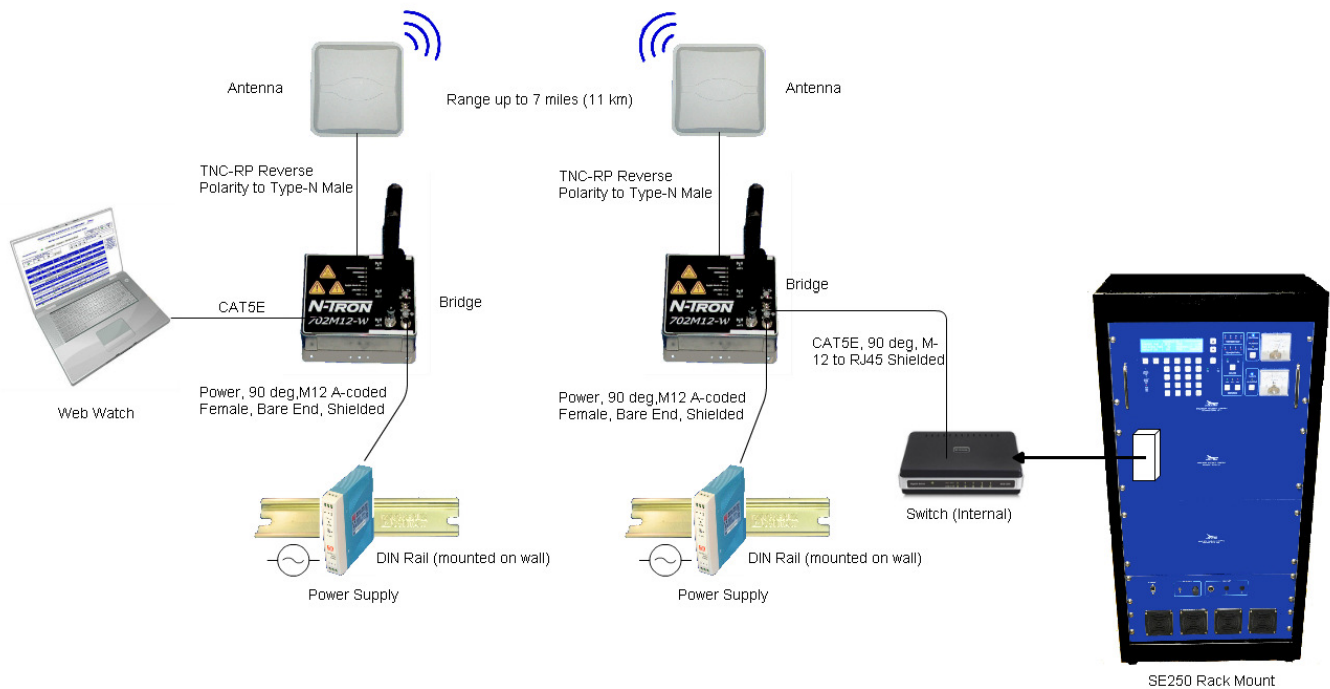
Includes:

- Two Industrial Ethernet Wireless Radios
- Two 5.8Ghz, 19dBi Directional Panel Antennas with N-Female Connector and Mounting Brackets
- Two 24VDC Power Supplies
- Two DIN Rails
- All Interconnecting Ethernet and Power Cables



SLF83304

PART	P/N
Ethernet to Radio Link	SLF83304



Ethernet to Fiber Optic Converter

A Fiber Optic Converter is combined with an internal Ethernet bridge to allow connection of the transmitter's embedded serial server program with a remote computer utilizing a fiber medium.

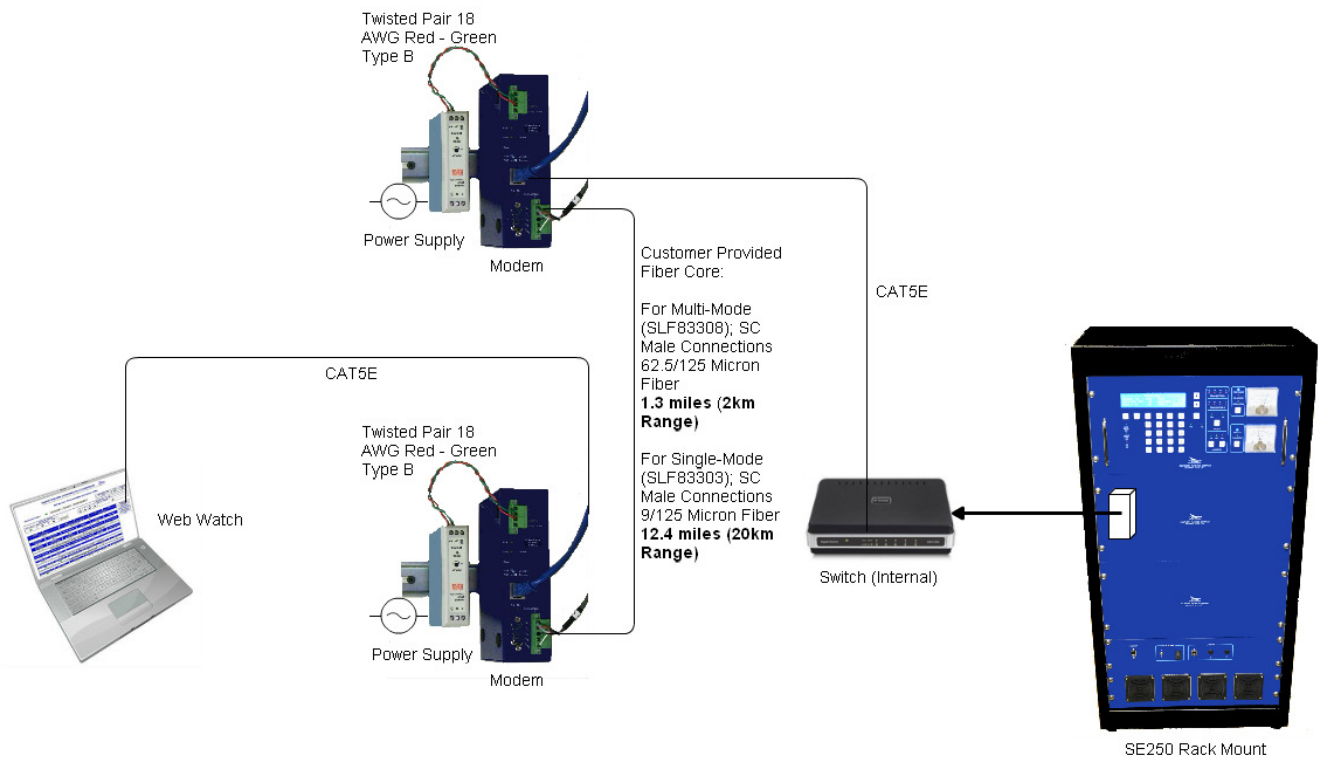
Multi-mode operation is used up to 2 km distance and Single-mode operation is used for distance up to 20 km. Two identical converters are required in order to communicate data between the Transmitter and an Ethernet ready computer.

Includes:

- Two 5 ft. (1.5m) Ethernet Cables
- Two 24VDC Power Supplies
- Two DIN Rails
- Two Multi-mode or Single-mode Ethernet to Fiber Optic Converters



ETHERNET TO FIBER	P/N
Multi-mode - 2 km	SLF83303
Single mode - 20 km	SLF83308



SE System Remote Control Over Ethernet Radio Link

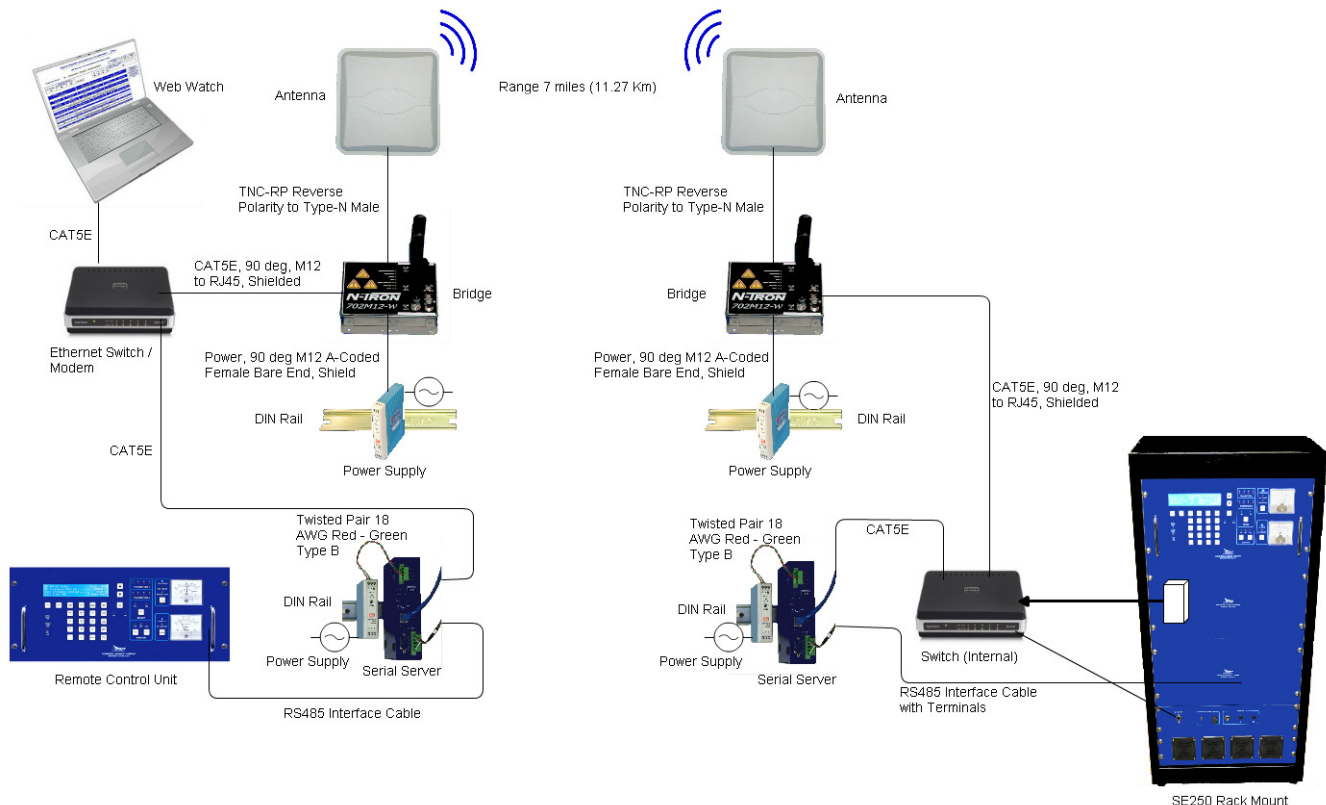
The Remote Control Over Ethernet Radio Link is a combination of two systems to provide control and monitoring from virtually anywhere.

Both the Remote Control Unit and Webwatch systems are connected via wireless LAN. This allows remote communication from a laptop and from the Remote Control Unit.

Includes:

- Two Ethernet Bridges, Wireless IP67
- Four 24VDC Power Supplies
- Two Serial Servers
- One Ethernet Desktop Switch
- Four DIN Rails
- Two TNC-RP Reverse Polarity to Type-N Male Cables
- Two CAT5E Cables
- Two Power, 90 deg M12 A-coded Female Cables
- Two CAT5E, 90 deg M12 to RJ45 Cables
- One RS485 Interface Cable
- One RS485 Interface Cable with Terminals

PART	P/N
Ethernet to Radio Link	SLF83323



Ethernet Land Line Dial-Up

This modem is a Remote Access Switch that combines a telephone modem with a 5 port Ethernet managed switch. This powerful combination allows easy and secure access of the Ethernet network from any remote location over standard telephone lines.

This configuration is only intended to allow the end user access to the transmitter's embedded Web Server via a dial-up telephone network modem.

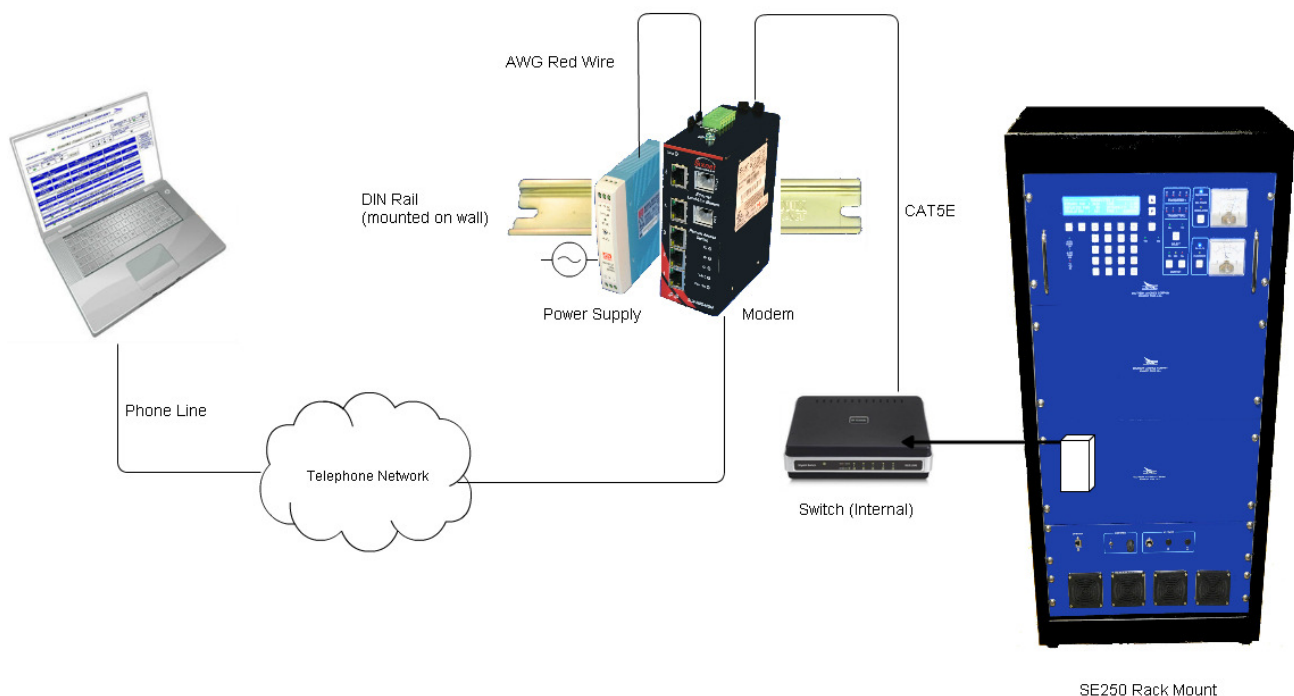
When dialed, the transmitter will answer automatically.

Includes:

- One 5 ft. (1.5m) Ethernet Cable
- One 24VDC Power Supply
- One DIN Rail
- One Five Port 10/100 Ethernet to 56K Dialup Modem



PART	P/N
Ethernet to Land Line	SLF83314



Ethernet Leased Line Modem

A Leased Line Modem is combined with an internal Ethernet bridge to allow connection of the SE transmitter to a remote computer via a TELCO Network.

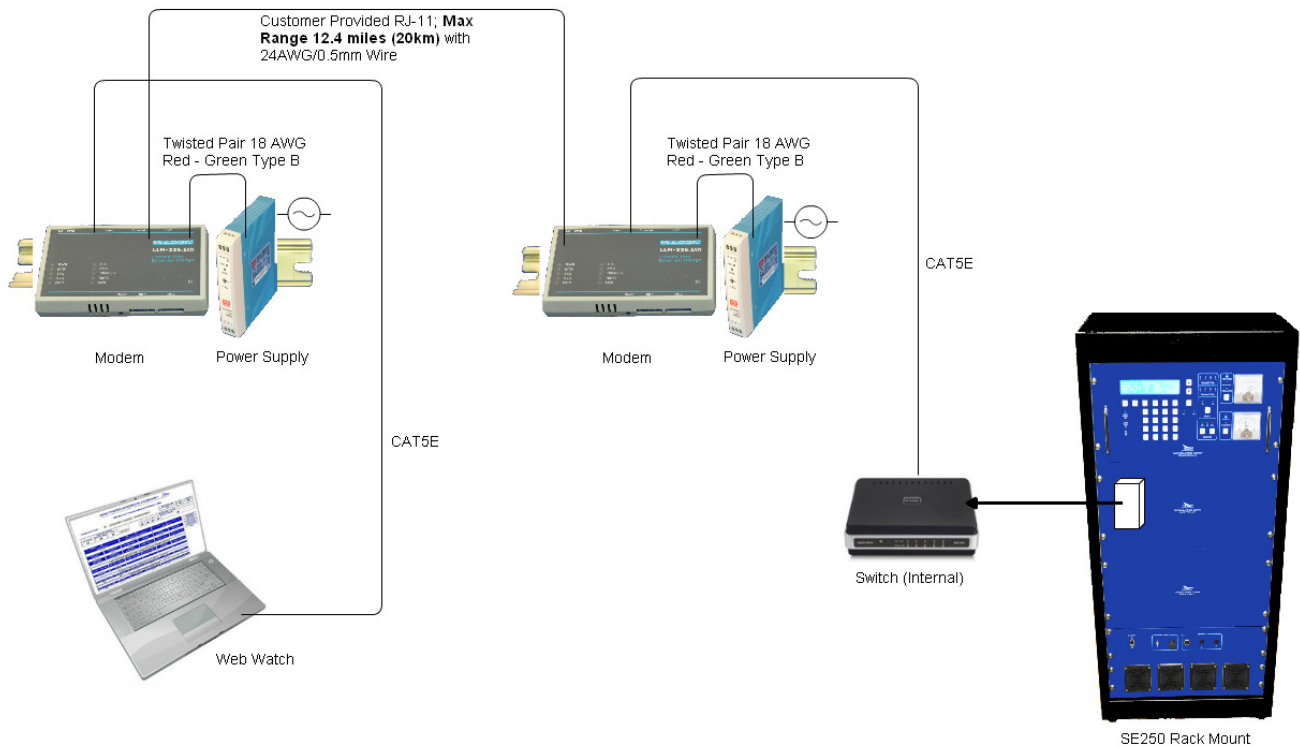
Two identical modems are required for proper communication of data over telephone line or copper wires extended between the user's computer and the transmitter.

Includes:

- Two 5 ft. (1.5m) Ethernet Cables
- Two Ethernet to Leased Line modems
- Two 24VDC Power Supplies
- Two DIN Rails



PART	P/N
Ethernet to Leased Line	SLF83301



Ethernet Extender

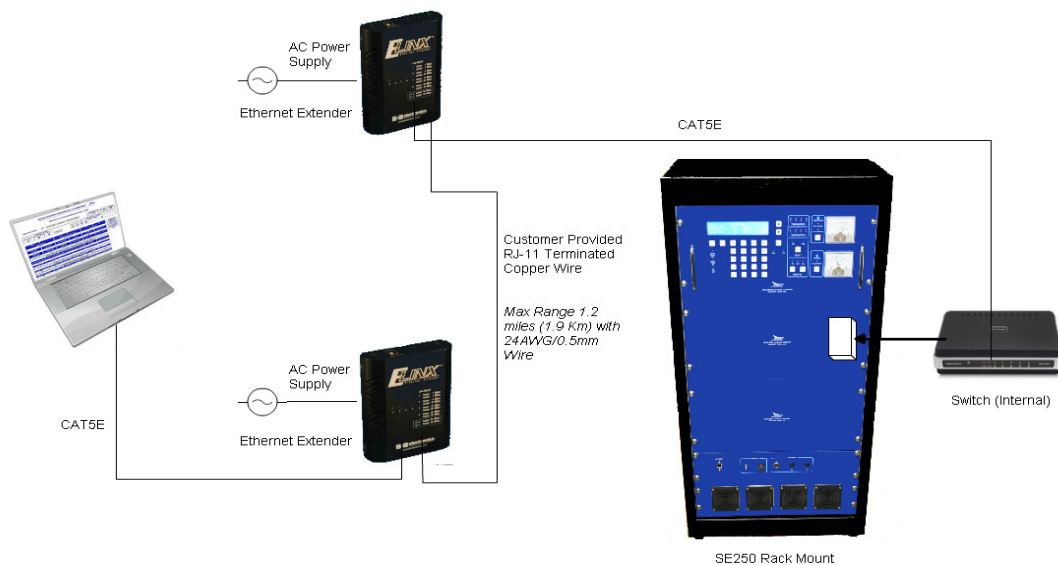
Two Ethernet Extenders are combined with an internal Ethernet bridge to allow series extension of the transmitter's Ethernet communication network via a RJ-11 terminated TELCO Network cable.

Includes:

- Two AC to DC Power Adaptors
- One Quick Start Guide
- Two 5 ft. (1.5m) Ethernet Cables
- Two Ethernet Extenders, 10/100 Mbps, 6200 ft. range



PART	P/N
Ethernet Extender	SLF83315



Key Features of Web Watch:

- TX Setup (RF Frequency, Tone Frequency, Call Sign, TX Mode, RF Power Level, and Modulation Level)
- Calibration (Power Factor, Modulation Factor, Power Display Error, Frequency, and Antenna Factor)
- IP Configuration (IP Address, Network Mask, and Gateway)
- Time & Date
- Site Location
- Save allows the user to save the current system configuration.