

Operational Description for the NCBSLTMA.

This is a 11 mega bit per second wireless local area network bridge radio that transceives a direct sequence spread spectrum carrier in the 2400-2483.5 MHz band. The data is input and output from a 10 Base T (Ethernet) connection and routed to a processor unit which formats the data and presents it to a Lucent PCMIA card to perform the conversion to and from DSSS. An external amplifier amplifies the RF signals on both receive and transmit. A 24 dBi gain parabolic reflector 'grill' type of antenna is also supplied.

The internals of the NCBSLTMA consists of a power supply pcb, a processor unit, and a Lucent Technologies PCMIA card. The power supply pcb converts the incoming 18Vdc into voltages needed by the processor unit and the external amplifier.

The functional configuration of the device is as a fixed mount, on a mast or other self supporting fixture. The weather proof radio is mounted physically close to the antenna and power and data is routed over a distance to the users facility. This is done to minimize the considerable loss that would otherwise exist if the radio were placed at the users facility and a length of coax were used between the facility and fixed mounted antenna. DC power is supplied to the external amplifier via a

The Lucent Technologies card used in this radio performs the conversion to and from DSSS and modeming on a 2400 MHz carrier.