

EXHIBIT H

Theory of Operation for OTC Telecom Model Air EZY éLAN II

Principle of Operation

AirEzy2411 eLAN Bridge (the Device) is a time-division-duplex wireless spread spectrum transceiver for computer data communication applications. The Device functions both as a transmitter and a receiver. The transmitting and the receiving operations are time-domain duplexed.

AirEzy2411 eLAN-Bridge employs direct sequence spread spectrum modulation. When operating in the transmitting mode, the Device takes digital data bits to be transmitted from a computer and feeds the bits into a spreader. The spreader employs the M-ary Bi-Orthogonal Keying (MBOK) to convert each 8-bit symbol into a pair of 8-bit sequences. Each bit in the sequence is referred as a **chip**. The symbol clock rate is 1.375 MHz. The **chip** clock rate is 11 MHz. The Device then modulates the chips onto a radio frequency carrier using differential quadriphase shift keying (DQPSK) and transmits each sequence through the I and the Q radio channels. By combining MBOK with DQPSK modulation, an effective data rate of 11 Mbps is achieved. The transmitting power is less than 0.1 watts.

During the receiving mode operation, the Device receives the radio signal from an antenna and demodulates the received signal into a baseband signal corresponding to the chips sent from the transmitting end. The Device then feeds the baseband signal into a despreader which recovers the original information data bits from the chips and sends the digital information to a computer.

The data interface between AirEzy2411 eLAN Bridge and the computer is through a conventional Ethernet 10BaseT port. The transmitting computer sends the data to be transmitted through the Ethernet 10BaseT port to AirEzy2411 eLAN Bridge. On the receiving end AirEzy2411 eLAN Bridge sends the received data bits to the computer also through an Ethernet 10BaseT port.

AirEzy2411 eLAN Bridge employs the carrier sensing multiple access (CSMA) protocol to facilitate the networking function. Prior to each Device 's transmission of the signal, it has to ensure that there is no other transmission already in progress. AirEzy2411 eLAN Bridge employs packet data transmission with CRC to ensure data integrity.