



15 Allstate Parkway, Markham, Ontario, L3R 5B4
 www.pwav.com, 905-940-1400, 905-946-3392 FAX

LinkNet LNKF100 Service Module

January 27, 2006

1. Overview

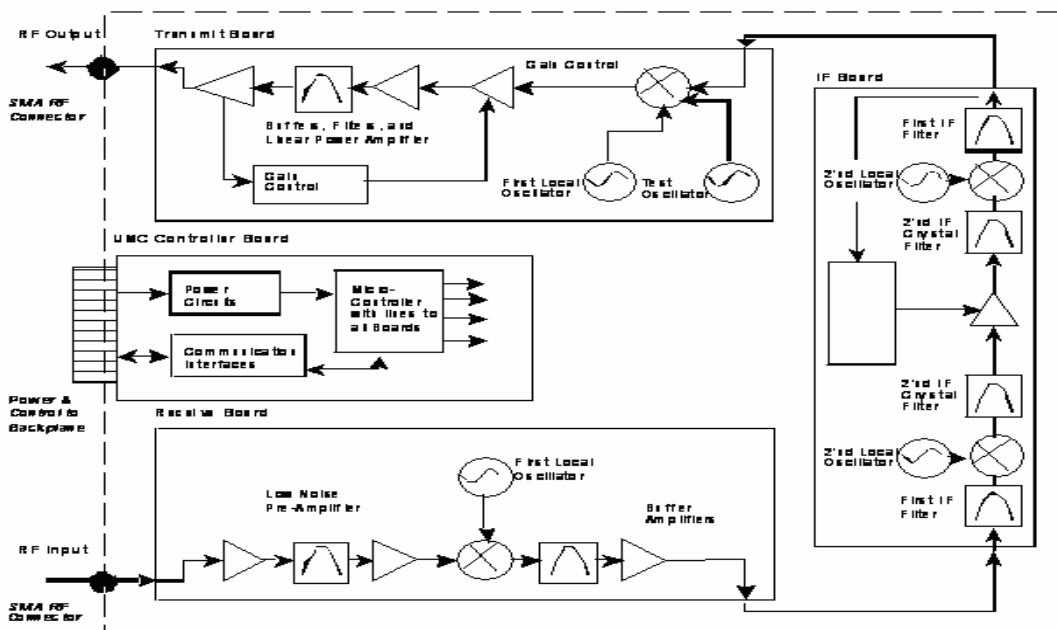
A LinkNet FM Module is a radio repeater that simultaneously receives and transmits a single narrow band radio channel. The normal application of a LinkNet FM Module is as an on-frequency repeater where the input and output are on exactly the same frequency. It can also be used as a frequency translating repeater where the input and output can be individually set to any frequency in the specified band (see Table 1 for details).

The LinkNet FM Module accomplishes its repeater function without store and forward circuitry, or expensive conventional simulcasting techniques. The fact that the same frequency can be retransmitted by a LinkNet FM Module means that additional frequency allocations are not required in situations where an existing radio coverage pattern needs to be extended. The most common LinkNet FM Module applications are the extension of above ground signals into buildings, tunnels, vehicles or the extension of radio coverage patterns into outdoor shaded areas such as deep valleys.

From an applications standpoint, a LinkNet FM Module is very similar to a regular two-way radio repeater. LinkNet FM Modules can be combined using regular two-way radio multicoupling or duplexing equipment and have input and output signal characteristics to those of regular transmitters and receivers. The one special consideration in LinkNet FM Module systems is that of input to output antenna isolation. This must be carefully engineered for each installation.

LinkNet FM Modules are designed for indoor use only and are intended for mounting in a standard EIA 19 inch rack. The Modular design of LinkNet FM Module circuitry allows for easy servicing, stocking of spares, adaptability and upgrade ability.

2. Block Diagram



Block diagram of LinkNet LNKF100 service module.