

LinkNet™ 800 MHz FM Module. Wireless Inside. Made Simple.



LinkNet is the Ultimate Wireless Service Convergence Platform – made simple to meet complex challenges. It is the only platform you will need now or in the future.

The LinkNet 800 MHz FM Module is a single narrow band on-frequency repeater designed to receive and transmit on the same frequency. It ensures that your clean, clear signals arrive at their intended destination no matter where you are – buildings, tunnels, garages, deep valleys and other challenging RF shielded structures. The LinkNet 800 MHz FM modules cover the 800 MHz range. Please see specifications on reverse for sub-band selections. The LinkNet 800 MHz FM module is designed to operate in the LinkNet Convergence Platform with its unique modular design, making it the most flexible and scalable solution on the market today and allowing you to extend coverage in ways that macro-networks can't.

Additional Features and Benefits

Easy Set-up Configuration

All major components are 'plug-and-play/unplug and-remove' to minimize installation down time and eliminate the need for extensive service equipment on-site.

Hot Swappable

Modules can be added to the LinkNet Platform without powering down the entire system.

Diagnostic Features

The LinkNet 800 MHz FM module automatically performs a self-diagnostic check when inserted into the chassis. As well, with the Gateway Module major fault conditions can be constantly monitored, including;

- Frequency synchronization
- Primary power failure
- Thermal management
- Over-current/under-current

Responds only to Assigned Channels

The LinkNet 800 MHz FM Module does not re-transmit noise, interference or adjacent channels. Only those frequencies desired will be retransmitted, ideal for congested urban or high density RF environments.

specifications

Module Specifications

Frequency Bands	806-824 MHz, 851-869 MHz, (FM) 896-902 MHz, 935-941 MHz
Modulation & Bandwidths	Narrowband FM 25 or 12.5 KHz (as per Model Chart below)
RF Frequency Stability	Tracks input Signal Exactly
Maximum RF Output Power	+38 dBm +37 dBm for -G2 & -H2 Models
RF Output Power Range	Power can be reduced 20 dB in 1dB Steps (AGC Controlled)
RF Output Power Variation	+/- 1 dB
Input Dynamic Range	-110 to -30 dBm
Input Sensitivity Adjust Range	-110 to -50 dBm
Input Hysteresis	1 to 10 dB
Adjacent Channel Selectivity	60 dB Minimum
Transmit Duty Cycle	Continuous
Transmit Spurious	-13 dBm max
Receive Conducted Spurious	-57 dBm max
Group Delay	<120 uS for 25 KHz, <160 uS for 12.5 KHz
Audio Distortion & Noise	<3% Increase
RF Connectors	SMA (50Ω) Connectors on back of Card-Cage
Module Power Supply Requirements	45 Watts Maximum
Connections	Edge Connector & 2 Blind-Mate RF Connectors to Card-Cage, DB-15 Connector on back of Card-Cage provides per-Module Fault Relay, Interconnect to other Modules, & RS-232 Connection
Front Panel Indicators	Operating, Stand by, Fault, Program Mode, Receive, Transmit
Configuration Options	RF Modules may be configured either via the optional Gateway Module, or via a PC and an RS-232 Connection via the Card-Cage.
Operating Temperature Range	-10 to +50°C; consult Kaval for installation specific forced-air cooling requirements.
Operating Humidity Range	10 to 90% RH, Non-Condensing
Size	9.11" High x 2.00" Wide x 14.00" Deep
Weight	10 lbs., 4.5 kg. Max

LNKF400 Module Family

MODEL	TYPE	FREQUENCY
LNKF800-A1	25 KHz FM Channels	806-824 MHz (FM)
LNKF800-B1	25 KHz FM Channels	851-869 MHz (FM)
LNKF800-C2	12.5 KHz FM Channels	806-824 MHz (FM)
LNKF800-D2	12.5 KHz FM Channels	851-869 MHz (FM)
LNKF800-G2	12.5 KHz FM Channels	896-902 MHz (FM)
LNKF800-H2	12.5 KHz FM Channels	935-941 MHz (FM)



Wireless inside. Made possible.