



Epsilon Lambda Electronics

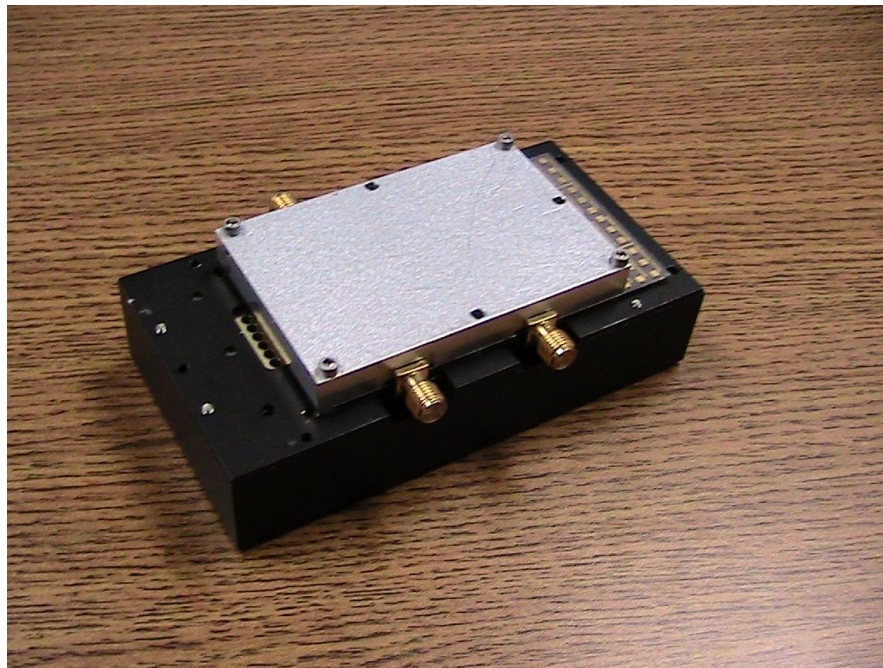
Since 1974

**Celebrating 37 Years as the Millimeter Wave Industry
Technology Leader**

V-BAND WIRELESS NETWORK NODES

BROADBAND WIRELESS PERSONAL AREA NETWORK FOR VOICE AND DATA

SECURE LOCAL NETWORK FREE FROM INTERFERENCE BY OTHER NETWORKS



FEATURES

- Seven GHz total spectrum available in unlicensed ISM band 57-64GHz
- Nodes have simple printed antenna with fully integrated monolithic transceiver
- Operates directly with COTS network protocols as inputs/outputs such as IEEE 802.11(g/n); IEEE 802.15/ZIGBEE; BLUETOOTH
- IEEE 802.15.3c high data rate alternative protocol under consideration
- Low transmitter power
- Operable from Battery Supply Voltages for portable use
- Compact Size, Rugged Construction
- Replaces the antenna connection on typical commercial microwave network nodes to facilitate 60 GHz operation

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396 Fenton Lane Suite 601 *West Chicago IL 60185 * 630 293 7118 * 630 293 5809 fax

This low cost, wideband network node can be operated in one of two modes:

1. Operating with existing network protocol but which translates the microwave carrier frequency to 60 GHz band for WPAN transmission, thereby avoiding the interference and privacy issues associated with microwave WLAN operation.
2. Operating with 802.15.3c protocol using direct V-band modulation to achieve broadband high data rate transmission while achieving greater security through atmospheric absorption.

APPLICATIONS: Wireless PAN for secure commercial and business networking in factory, office and short range field operations.

Military: include replacing cables in avionics and robotic vehicle systems; wireless helmets for crew members aboard fixed wing and rotary wing aircraft and in ground vehicles; and dismounts in battlefield maneuvers.

Model ELCD62-1A Specifications

Transmitter Power	+10 dBm
Center Frequency	57-64 GHz
Temperature Range	-20 to +85 degree C
Antenna Gain	>12 dB
Azimuth FOV	Fixed by antenna beam angle
Azimuth Beam Angle	10degree
Elevation Beam Angle (and FOV)	20 degree
Polarization	Linear
Maximum Operating Range	50 meters (Depends upon interface S/N)
DC Power (Electronics)	5V / max 1.0 A
Weight	< 1 Kg
I/O Connection	SMA or TBD

Other antenna options are available for non-line-of-sight applications

- Information regarding this innovative network node product.

bobk@epsilon-lambda.com