



# **Epsilon Lambda Electronics**

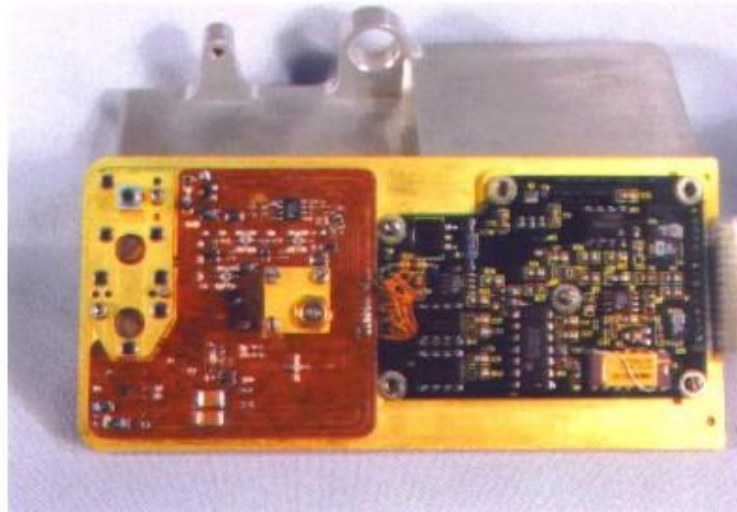
**Since 1974**

**Celebrating 35 Years as the Millimeter Wave Industry  
Technology Leader**

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Epsilon Lambda Electronics  
*Introduces*

**Two Dimensional Forward Looking Automotive Obstacle Detection  
Radar Sensor in W-BAND**



- **FM-CW Ranging Radar – Millimeter Wavelength (High Resolution)**
- **High Gain Antenna with range up to 150 meter (typical car)**
- **Azimuth and Range Object Location Determination**
- **Azimuth Field-of-View Selected by Antenna Specification**
- **Low Phase Noise Transceiver**
- **Operable from Battery Supply Voltages**
- **Compact Size, Rugged Construction**
- **Code Embedded to DSP Circuit Card**
- **F.O.V. Object Maps Displayed on Laptop for Sensor Testing**

This 2D radar sensor is suitable for highway vehicles, off road vehicles, ground robots, etc. Obstacle data reported includes range, azimuth angle, relative velocity, and signal return amplitude.

# Model ELFM72-1A Specifications

Transmitter Power	+13 dBm
Center Frequency	76.5 ± 0.5 GHz
Number of Obstacles in Image Map	4 in beam width
Temperature Range	-20 to +85 degree C
Antenna Gain	>27 dB
Azimuth FOV	Ten degree or Customer Selectable
Azimuth Beam Angle	10 degree
Azimuth Angle Resolution	1.0 degree
Elevation Beam Angle	4.0 degree
Polarization	Linear
Operating Range	150 meters (Typical Compact Car)
Obstacle List Update Rate	100 ms
Range Resolution	0.5 meter
DC Power (Electronics)	9-16 V / max 1.5 A
Weight	2.5 Kg
DSP Board	Supplied
I/O Connection	USB to Laptop computer

- Please contact Epsilon Lambda Electronics sales department for further information regarding this innovative radar sensor product.

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