



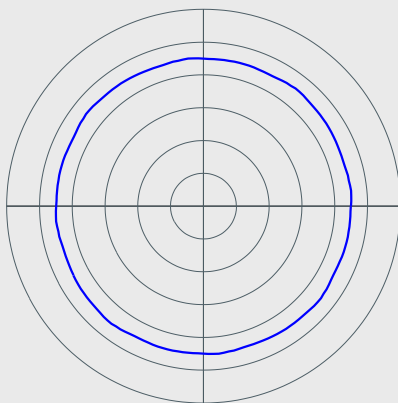
The FCI-3740 is well suited to applications such as

- Vehicular Networks
- MANET and Mesh Networks
- Direction finding
- Interference & Jammer reduction
- Software Defined Radio
- WiFi / Zigbee / Bluetooth

The FCI-3740 is a 2.4 GHz circular phased array antenna that is ideal for mobile applications. Features include:

- Connects with a wide variety of radios.
- Rugged construction and small size
- Low power consumption
- Simple configuration via RS-232, RS-485 or high speed synchronous serial bus.
- Precision control of phase and magnitude for each antenna element.
- Fast recall of pre-defined patterns.
- Two simultaneous signal paths: adaptive phased array and reference omnidirectional antenna
- Programmable or Automatic TX/RX control
- Embedded GPS
- Integrated Magnet Mount (optional suction cups)

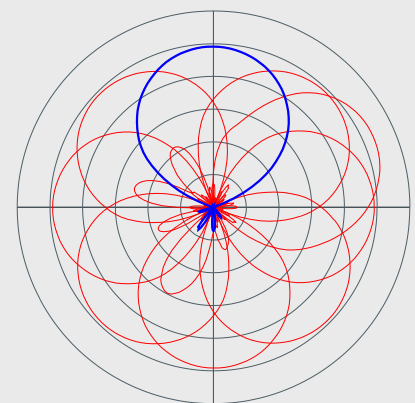
Example Patterns



Omnidirectional

A wide variety of patterns can be programmed into the FCI-3740, including:

- Omnidirectional
- High Gain Directional
- Sectors
- Low Sidelobe Directional
- Figure-8 (dual beam)



Directional Patterns

Array Type	Uniform Circular Array 8 antenna elements
Frequency Range	2400 MHz to 2500 MHz
Antenna Gain	14.5 dBi maximum directional gain 9 dBi antenna gain for omnidirectional pattern Steerable in azimuth
Phase Control, per element	1.0 degree resolution
Amplitude Control, per element	0.01 dB gain resolution, 20 dB minimum dynamic range
Control Interface	RS-232, RS-485, High Speed Synchronous Serial
Receive path characteristics	5.5 dB electrical gain, per element 3.0 dB maximum noise figure
Transmit path characteristics	5 dB per element electrical gain (14 dB aggregate per array) 42 dBm 1dB compression point 35 dBm output w/ 2% EVM on 802.11g waveform Independent Transmit gain control, 20 dB dynamic range Automatic TX sensing, 400 nS latency TX power sensor feedback, per element
Input VSWR at TNC port	2.0, maximum
Pattern Memory	127 patterns can be defined, stored and recalled Pattern definitions persist through reboots 1.2 μ S pattern settling time
Polarization	Vertical
Power Consumption	9-36 VDC 13 Watts (receive) 33 Watts (TX, full power)
Overall dimensions	12.0 inch diameter x 10.0 inch height
Connector Interfaces	TNC connectors for RF MIL-DTL-38999 connector for power and control
Temperature Rating	-40 to +85 Celsius internal (temp sensor provided)