

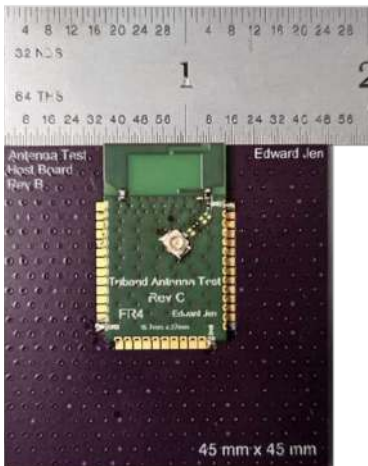
CEL's Latest Antenna Provides Multiple Benefits for IoT Applications



www.cel.com

CEL's latest patented antenna has been combined with NXP's IW610 chip set. The USB interface tri-mode radio provides Dual-Band Wi-Fi, BT, and 802.15.4 (Thread, Matter) functionality. This module was designed to deliver high performance in harsh environments and challenging enclosures.

ANTENNA

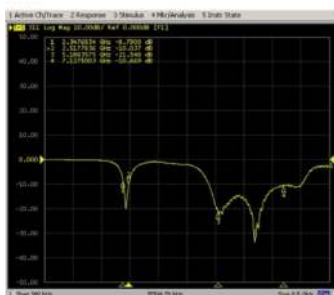


- Variant of newly patented tri-band antenna, less sensitive to changes in dielectric constant & thickness

HOST INTEGRATION ADVANTAGES

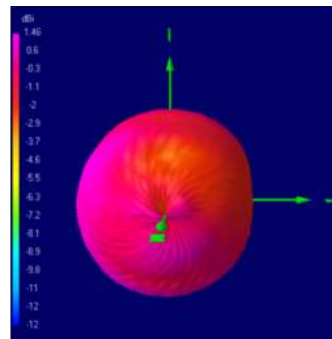
- No copper under antenna - enhance performance
- No cutout under & next to antenna - simplify host board
- Flush with edge of host PCB - space savings, reduces PCB & enclosure complexity

EXCELLENT RETURN LOSS



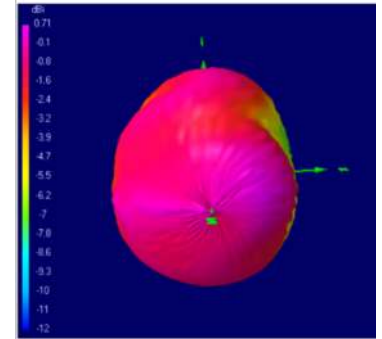
- High signal strength, enhanced data transmission rates, improved system efficiency
- Maintains network capacity, reduces interference, ensures reliable communication

VERY GOOD TRP MEASUREMENTS



2.4GHZ

- Omni
- >75% efficiency



5GHZ

- Omni
- ~75% efficiency

Stable radiation pattern at both bands

KEY BENEFITS OF HIGH-PERFORMANCE ANTENNA

TECHNICAL

- ✓ Range and Coverage
- ✓ Enclosure Penetration
- ✓ Overcome RF Noise and Physical Obstruction
- ✓ Faster Connections
- ✓ Lower Latency
- ✓ Higher Throughput
- ✓ Reduced Power Consumption
- ✓ Maximizes network capacity
- ✓ Strengthens network reliability

BUSINESS

- ✓ Lowest Installation Cost - Faster Installs, Fewer Repeaters
- ✓ Reduced BOM Cost - Eliminate external antenna and installation cost
- ✓ Minimize OPEX - Fewer service and support calls, decrease truck rolls
- ✓ More satisfied end users
- ✓ Brand enhancement