

## DIGI WDS / ANTENNA DESIGN

PART NUMBER: WDS-ANT103-L

# LTE ANTENNA MULTI-BAND, MAIN AND DIVERSITY MATCHING

Maximise your product's wireless performance  
with custom antenna design solutions

The antenna is the most common point of failure in a wireless design. When designed correctly, the antenna creates a high performance wireless product this is certification ready.

Antenna design is a very complex process that requires simulation tools and experienced RF antenna designers. Digi's Wireless Design Services has a state of the art RF testing lab along with experienced engineers that design hundreds of certification ready products each year.

Impedance matching an existing antenna solution involves measuring the antenna impedance with a network analyzer and finding a matching network for the antenna. This product is intended for two multiple band LTE antennas or multi-band Wi-Fi antennas, main and diversity. Single band antennas should use WDS-ANT103-SB. This product will give the device the best chance of passing certifications and provide optimal wireless performance. Most designs fail certifications or have poor performance because this vital step is skipped. Standard pricing includes two multi-band antennas.

Schedule time to complete is 1 week per antenna.

The customer should provide the following items:

1. Schematics/PCB files
2. Bill of Materials
3. Device use cases
4. Two devices (include batteries, production plastics, cables, etc.)
5. Cellular carrier(s) if applicable

The deliverables are as follows:

1. Baseline antenna impedance
2. Newly improved antenna impedance with matching network
3. Schematic diagram of matching network including values and part numbers
4. Recommendations for next steps

For more information on how Digi WDS/Antenna Design can bring powerful, reliable connectivity to your assets, visit [www.digi.com/wds](http://www.digi.com/wds).

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