# Reach Xtend<sup>TM</sup> (FR05-S1-N-0-001)

Bluetooth, Zigbee, 802.11 b/g/n WLAN (2.4 – 2.5 GHz)

Fractus Antennas specializes in enabling effective mobile communications. Using Fractus technology, we design and manufacture optimized antennas to make your wireless devices more competitive. Our mission is to help our clients develop innovative products and accelerate their time to market through our expertise in antenna design, testing and manufacturing.

The Reach Xtend<sup>™</sup> Bluetooth® & 802.11b/g/n WLAN Chip Antenna is engineered specifically for devices operating at 2.4 GHz where high performance and low-cost are mandatory. The Reach Xtend<sup>™</sup> antenna is built on glass epoxy substrate.

Taking advantage of the space-filling properties, this small planar monopole antenna is ideal for use within indoor (highly scattered) environments. The Reach Xtend<sup>™</sup> Bluetooth® & 802.11b /g WLAN Chip Antenna speeds your time to market by allowing you to integrate it within your industrial design easily and efficiently.

#### **Product Benefits**

### High efficiency

Increases your device's range and lengthens battery life.

## • Omnidirectional pattern

Optimizes device usage due to a uniform radiation pattern.

#### Small Volume

Allows integration into space limited areas easily and efficiently.

# • Multi-mode support

Works for Bluetooth and Wi-Fi 802.11 b/g/n standards.

#### **6.7 mm x 6.7 mm x 0.8 mm** (image larger than real size)

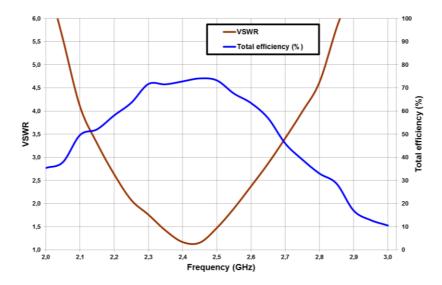


PAT US 7,148,850, US 7,202,822

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# VSWR and Total Efficiency (%) vs. Frequency (GHz)



Technical Features	
Frequency range	2.4 GHz – 2.5 GHz
Average Efficiency	74.0 %
Peak Gain	1.3 dBi
Radiation Pattern	Omnidirectional
VSWR	< 2:1
Polarization	Linear
Weight (approx.)	0.1 g
Temperature	-40°C to +85°C
Impedance	$50\Omega$
Dimensions (L x W x H)	6.7 mm x 6.7 mm x 0.8 mm

Measures from the evaluation board (48.0 mm x 23.0 mm x 1.0 mm)

See pictures of the evaluation boards and graphs of the specs in the <u>User Manual</u>.

For additional information, please visit <a href="www.fractusantennas.com">www.fractusantennas.com</a> or contact <a href="mailto:info@fractusantennas.com">info@fractusantennas.com</a>.