**Product Description**

The TiWi5™ is a high-performance combo module providing Wi-Fi capabilities in both the 2.4 GHz and 5.8 GHz bands. This dual-band Wi-Fi® / Bluetooth® module supports single stream WLAN data rates to 65 Mbps and Bluetooth 2.1+EDR and Bluetooth 4.0 (BLE) in a cost effective, pre-certified footprint. Designed to realize the necessary PHY/MAC layers to support WLAN applications in conjunction with a host processor over a SDIO interface.

**Features and Benefits**

- Dual-band 2.4 GHz and 5.8 GHz operation
- Bluetooth® Smart-Ready (Bluetooth 2.1+EDR, Bluetooth Low Energy 4.0) and ANT+ capable
- Small footprint: 13 mm x 18 mm x 1.9 mm
- Industrial operating temperature: -40° to +85°C
- FCC (USA), IC (Canada) and ETSI (Europe) Module Certification
- On-module TCXO, band-pass filter, and power regulation
- Open source Linux drivers available for Wi-Fi

**Practical Applications:**

Hospitals and ‘high traffic’ environments. Medical, Security, HVAC Control, Telematics, and Gateway Design.
**TIWi5 Module Performance**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footprint</td>
<td>13 mm x 18 mm x 1.9 mm</td>
</tr>
<tr>
<td>Operating Temp</td>
<td>-40 to +85°C</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>3.0 V to 4.8 V</td>
</tr>
<tr>
<td>WLAN Transmit Power</td>
<td>+18.3 dBm, 11 Mbps, CCK (b)</td>
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<tr>
<td></td>
<td>+14.4 dBm, 54 Mbps, OFDM (g)</td>
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<tr>
<td></td>
<td>+12.5 dBm, 65 Mbps, OFDM (n)</td>
</tr>
<tr>
<td>WLAN Sensitivity</td>
<td>-88 dBm, 8% PER, 11 Mbps</td>
</tr>
<tr>
<td></td>
<td>-74 dBm, 10% PER, 54 Mbps</td>
</tr>
<tr>
<td></td>
<td>-72 dBm, 10% PER, 65 Mbps</td>
</tr>
</tbody>
</table>

For full specifications on TIWi5, please refer to datasheet.

**Technical Details**

- 802.11 a/b/g/n compliant
- Bluetooth 2.1+EDR, Power Class 1.5 Compliant
- Full support for BLE 4.0 and ANT+

**Key Features**

- Linux drivers available and supported
- Terminal for PCB/Chip antenna feeds
- Industrial-rated operating temperature

**EMC Testing & Certification**

At LSR, we understand it is critical for your company to have a compliant product supported by the appropriate documentation, ready for deployment into the market. LSR provides the experience and knowledge to provide quality test services that meet your timeline and budget.

- On-Site FCC / IC / CE EMC Certification
- Wireless & Antenna Testing
- EMC Testing
- International Testing Services

**Design Services**

LSR delivers complete system solutions from concept to manufacturing. We are your wireless M2M solutions partner, providing complete turnkey services and solutions.

- RF Design/Engineering
- Software/Firmware Design
- Antenna Design
- Industrial Design
- Mechanical Engineering

**Wireless Products**

LSR offers the fastest, lowest cost way to add wireless capabilities to your product concept. LSR’s fully-certified modules and antennas accelerate your time-to-market and support the full breadth of communication technologies, including:

- Wi-Fi®
- Bluetooth®
- Bluetooth® Smart
- ZigBee®
- 802.15.4 & proprietary protocols