RF solutions
AMC, AAMC, SMA
Custom Cable Assemblies
TNC / BNC
- Standard and Reverse Polarity

features and benefits
Diverse Product Line
Sealed Options Available

applications
Zigbee
Bluetooth
Wireless USB
RFID
802.11 A, B, G, N
Asset Tracking
Wireless

Wireless Person Access Networks (WPAN)

**Bluetooth** is a standard designated mostly for low power consumption, with a short range. It is based on low-cost transceiver microchips in each device. Several devices can communicate with each other at once, overcoming past synchronization issues. The items do not have to be in each others line of site since they use a radio broadcast communication system.

**Zigbee** is a specification for a group of high-level communication protocols using small and low power digital radios. They are based on the IEEE 802.15.4-2003 standard for wireless personal area networks. Examples of Zigbee applications include using headphones to connect to a cell phone via short-range radio. Zigbee is not only less expensive then Bluetooth, but also targeted towards RF applications which require a low data rate, secure network, and longer battery life.

**Wireless USB** is a short-range and high bandwidth wireless radio communication protocol. It is used in wireless handheld controllers, printers, scanners, keyboards, as well as other computer peripherals.

802.11

IEEE 802.11 is a set of standards carrying out wireless local area network computer communication in the 2.4, 3.6 and 5 GHz frequency bands.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Release date</th>
<th>Op. Frequency</th>
<th>Throughput (typ.)</th>
<th>Net bit rate (max.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>802.11a</td>
<td>October 1999</td>
<td>5 GHz</td>
<td>27 Mbit/s</td>
<td>54 Mbit/s</td>
</tr>
<tr>
<td>802.11b</td>
<td>October 1999</td>
<td>2.4 GHz</td>
<td>~5 Mbit/s</td>
<td>11 Mbit/s</td>
</tr>
<tr>
<td>802.11g</td>
<td>June 2003</td>
<td>2.4 GHz</td>
<td>~22 Mbit/s</td>
<td>54 Mbit/s</td>
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<tr>
<td>802.11n</td>
<td>TBD</td>
<td>2.4/5 GHz</td>
<td>~144 Mbit/s</td>
<td>600 Mbit/s</td>
</tr>
</tbody>
</table>

Radio-frequency identification (RFID)

Typically, RFID is the use on an object applied to or built into a product, animal, or person for the use of identification and/or tracking. Radio waves are used to send information to the requestor. Tags can be read in some instances from several yards away and past the line of site.