Bluegiga eHealth Bluetooth® Gateways

Access Point 3201™

Description
Bluegiga’s Access Point 3201 is a small and cost optimized access device targeted at business applications. The product is designed to fit into wireless Bluetooth applications where the network performance, reliability, scalability and easy management are important design drivers.

The Access Point is equipped with Bluegiga’s industry leading 2.1 + EDR compliant WT11 Bluetooth module providing users with the features and benefits of the very latest Bluetooth standard. The product also has an external USB connector for extending the product capabilities with GPRS/3G USB modems, Wi-Fi or extra memory.

The Access Point is an evolution from Bluegiga’s extremely reliable and successful Access Server product family. The product’s software and user interface makes it compatible with Bluegiga Access Servers. Access Point 3201 can be remotely managed with Bluegiga Solution Manager (BSM) - enabling remote management of a number of Access Points from a centralized location.

The heart of Access Point 3201 is Bluegiga’s customized Linux operating system with a number of built-in applications, such as SPP-over-IP and ObexSender. For Bluetooth wireless technology, The product has extremely advanced, reliable and easy-to-use software interface called iWRAP, which enables you to connect your Bluetooth equipped devices into TCP/IP networks with built-in security and reliability. Access Point 3201 is also available for OEM’s without the housing providing total freedom of re-branding.

Key Features
- The smallest Bluetooth Access Point in the industry
- Embedded Linux™ Operating System
- Turn-key applications for Bluetooth networking and Bluetooth proximity marketing
- Bluetooth class 1, 2.0/2.1 + EDR compliant
- Supported Bluetooth profiles: SPP, OBEX OPP, OBEX, FTP, PAN, LAN Access, DUN-GW, DI, HDP
- Bluetooth, CE, Fcc and Industry Canada qualified
- External and internal antenna options
- Adjustable connection range between 1-200 meters

Applications
- Connectivity
- eHealth
- Point of sales
- Proximity marketing
- Digital Pen
Long Range Bluetooth Access Point 3241™

Description
The Long Range Bluetooth Access Point 3241 (AP3241) is the ideal solution for demanding connectivity applications, where extreme performance and robustness is needed. AP3241 is ideal for applications where different Bluetooth devices need to be wirelessly connected to the Internet. These applications include medical, point-of-sale, proximity marketing, location tracking, digital pen and generic Bluetooth networking.

The Bluetooth radio performance is taken to the extreme and AP3241 can reach line-of-sight range up to 1000 meters. With typical class 2 Bluetooth devices, the improved sensitivity increases the range up to 80 meters – meaning 3-4 times more range than normally. The built-in USB port allows the use of optional accessories, such as Wi-Fi, 3G modems or extra memory.

The AP3241 has built-in applications for use in e.g. eHealth and it offers the standardized Bluetooth Health Device Profile and Continua based IEEE 11073-20601 manager. The data can be relayed to various back-end services such as Google Health. AP3241 is also ideal for Bluetooth proximity marketing applications, because the improved range offers extended coverage and more reliable file delivery. The built-in proximity marketing software enables almost all turn-key solutions.

Key Features
- Significant Bluetooth radio performance
  - +20 dBm transmit power
  - –90dBm receiver sensitivity
- Maximum line-of-sight range 1000m
- Bluetooth 2.1 + EDR compliant
- 10/100Mbps Ethernet interface
- USB host port for optional accessories
- Built-in application interfaces for medical, Bluetooth marketing and TCP/IP networking
- Centralized remote management system with Bluegiga Solution Manager™
- Supported Bluetooth profiles: SPP, OBEX OPP, OBEX FTP, PAN, LAN Access, DI and HDP
- Embedded Linux™ operating system
- Software development kit

Applications
- Connectivity
- eHealth
- Point of sales
- Proximity marketing
- Digital Pen
- M2M

Bluegiga Solution Manager™

Description
Bluegiga Solution Manager (BSM) is a web-based remote management and monitoring platform for Bluegiga Access Servers. By using BSM, you can simultaneously upgrade, monitor and configure a large number of Bluegiga Access Servers, instead of configuring each device one-by-one.

BSM Server

User Interface

Access Server

Key Features
- Provides remote management of Bluegiga Bluetooth Access Server groups
- Enables managing the Bluetooth marketing applications (ObexSender)
- Simple graphical user interface
- Can be used over LAN, GPRS, or any other Internet connection type
- Communicates by using secure, encrypted network protocols
- Enables remote upgrades of Bluegiga Bluetooth Access Server software and content
- Available APIs enable complete look and feel customization
- User permissions can be tailored to provide different levels of user accounts
<table>
<thead>
<tr>
<th>Features</th>
<th>AP3201</th>
<th>AP3241</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bluetooth specification</strong></td>
<td>2.0/2.1 + EDR</td>
<td>2.1 + EDR</td>
</tr>
<tr>
<td><strong>Bluetooth class</strong></td>
<td>1 (Configurable for Class 2)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Range, line of sight</strong></td>
<td>200m</td>
<td>1000m</td>
</tr>
<tr>
<td><strong>Number of connections</strong></td>
<td>Up to 7</td>
<td>Up to 7</td>
</tr>
<tr>
<td><strong>Antenna</strong></td>
<td>Internal or external</td>
<td>Internal</td>
</tr>
<tr>
<td><strong>Temperature range</strong></td>
<td>0° to +60°</td>
<td>0° to +60°</td>
</tr>
<tr>
<td><strong>Maximum throughput</strong></td>
<td>2,1Mbps</td>
<td>2,1Mbps</td>
</tr>
<tr>
<td><strong>Integration</strong></td>
<td>Housed or OEM in PCB form</td>
<td>Housed or OEM in PCB form</td>
</tr>
<tr>
<td><strong>Interfaces</strong></td>
<td>ETH, USB</td>
<td>Ethernet, USB host</td>
</tr>
<tr>
<td><strong>DC input</strong></td>
<td>9-24 VDC</td>
<td>9-24 VDC</td>
</tr>
<tr>
<td><strong>AFH supported</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Network management</strong></td>
<td>BSM, web interface, SSH</td>
<td>BSM, web interface, SSH</td>
</tr>
<tr>
<td><strong>Memory</strong>*)</td>
<td>32MB RAM, 16MB Flash</td>
<td>32MB RAM, 16MB Flash</td>
</tr>
<tr>
<td><strong>Bluetooth module</strong></td>
<td>Bluegiga WT11-A/E</td>
<td>Bluegiga WT41</td>
</tr>
<tr>
<td><strong>Certifications</strong></td>
<td>Bluetooth, CE, FCC and IC</td>
<td>Bluetooth, CE, FCC, IC and Telec</td>
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<tr>
<td><strong>Ability to host applications</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Operating system</strong></td>
<td>Linux</td>
<td>Linux</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>74 g</td>
<td>74 g</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>90x59x30mm</td>
<td>90x59x30mm</td>
</tr>
<tr>
<td><strong>Profiles</strong></td>
<td>SPP, OBEX OPP, OBEX FTP, PAN, LAN Access, DI, HDP</td>
<td>SPP, OBEX OPP and FTP, PAN, LAN Access, DI and HDP</td>
</tr>
</tbody>
</table>

*) Extendable to GBs

**Bluegiga Solution Manager (BSM)**

Bluegiga Solution Manager (BSM) is a web-based remote management and monitoring platform for Bluegiga Access Servers. By using BSM, you can simultaneously upgrade, monitor and configure a large number of Bluegiga Access Servers, instead of configuring each device one-by-one.

- Provides remote management of Bluegiga Access Servers
- Enables managing the Bluetooth marketing applications (ObexSender)
- Simple graphical user interface
- Can be used over LAN, GPRS, or any other Internet connection type
- Communicates by using secure, encrypted network protocols
- Works seamlessly through firewalls
- Enables remote upgrades of Bluegiga Access Server software and content
- Available APIs enable complete look and feel customization
- User permissions can be tailored to provide different levels of user accounts