

# Bluegiga Access Server™



# **Key Features**

- Enables Bluetooth® networking between multiple devices and networks
- Serves up to 21 simultaneous Bluetooth connections with latest Bluetooth 2.0+ EDR standard(3Mbps)
- Supports all key communication standards:
  - Bluetooth Class 1 2
  - Ethernet (100Mbps)
  - Wi-Fi, GSMGPRS via external CF card
  - USB, RS232 and GPIO
- On Board 32MB RAM + 32MB Flash
- Offers an open platform for adding local applications (SDK available)
- All relevant Bluetooth profiles and APIs supported: SPP, OBEX OPP, OBEX, FTP, PAN, LAN Access, DUN-GW, DI and HDP
- +200 meter Bluetooth range / Software configurable to support 10 meter range only
- ▶ DHCP Support for plug n' play installation
- Available with integrated and external antenna versions

# **Description**

Bluegiga Access Servers are widely used from mission critical applications to high-volume marketing applications. Bluegiga Access Servers support multiple communication standards including Ethernet, Wi-Fi, and GSM/GPRS enabling full media-independent TCP/IP connectivity. Bluegiga Access Servers are easy to deploy and manage in existing wired and wireless networks without compromising reliability, speed or security. The device can be conveniently managed and remotely upgraded over encrypted links using Bluegiga Solution Manager Software.

Bluegiga Access Server<sup>TM</sup> is targeted at system integrators and original equipment manufacturers that want to deploy a secure, cost efficient, low power consumption and up to 250-meter range wireless network for *Bluetooth*-equipped devices. These devices include products such as barcode readers, pay-terminals, medical instruments, special purpose PDAs and mobile phones, and telemetry and machine-to-machine units.

Available with an optional mounting accessory, Bluegiga Access Server  $^{TM}$  can be fixed on walls and ceiling safely.

# **Applications**

- Bluetooth marketing
- Point-of-sale systems
- Logistics and transportation systems
- Bluetooth-to-TCP/IP networking
- Telemetry and machine-to-machine systems
- Medical and healthcare systems
- Fitness and sport telemetry systems
- Cable replacement
- Network access point
- Content and application distribution to mobile phones and PDAs







## TECHNICAL DETAILS



### **Networking**

- Bluetooth version 2.0 + EDR and 1.2 compliant
- SPP, OBEX OPP, OBEX, FTP, PAN, LAN Access, DUN-GW, DI and HDP
- Point-to-Point, Point-to-Multipoint, Piconet and Scatternet
- Class 1, up to 250 meters. Software configurable to support Class 2, up to 10 meters
- Full TCP/IP support
- Transparent router or bridge
- With optional compact flash card WiFi 802.11b or GSM and GPRS
- Remote management and monitoring software

#### Software

- Bluegiga software
- iWRAP™ simple command interface
- Linux operating system
- Bluetooth, HTTP, FTP, and Telnet servers
- SPP-over-IP
- SSH® client and server
- DHCP client and server
- WRAP SMS Gateway
- Several configuration and application samples
- Obexsender marketing application

### Hardware

- 1 or 3 Bluetooth class 1 radios
- Processing power for customer applications
- Memory: 32MB RAM, 32MB flash
- Real time clock, battery backup
- Operating temperature 0 to +60° C
- Watchdog

### Interfaces/Connectors

- Ethernet 10/100 Mbps, RJ-45
- Compact flash card slot (for WiFi and GSM/GPRS)
- Serial port, RS-232, D9
- Power input, 9-24 VDC, 400 mA
- 14 x Buffered digital I/O (3,3V to 5,5V)
- LEDs and Buzzer

## Application Development with Optional Software Development Kit

- Development environment for Linux
- C and C++ supported
- Sample applications included
- Documentation

#### Mechanical Details

- Size: 220x150x30 mm
- Weight: 364g

#### **Product Codes**

- 7 Bluetooth connections (2291)
  - 2291; 1 Bluetooth radio, 56-bit BT encryption
  - 2291-128; 1 Bluetooth radio, 128-bit BT encryption
- 21 Bluetooth connections (2293)
  - 2293; 3 Bluetooth radios, 56-bit BT encryption
  - 2293-128; 3 Bluetooth radios, 128-bit BT encryption
- Accessories
  - 229X-M; Mounting Accessory
  - 2290-GPRS; GPRS/GSM card for CF Interface
  - 2290-WLAN; WLAN 802.11b card for CF interface
  - 2293/ OutD;
  - 2291/ OutD; Outdoor Installation Kit
- Development
  - W9SDK; WRAP 2293 Access Server with SDK
  - W9SWCD; WRAP SDK software CD

#### Certifications

- Bluetooth
- CE and FCC

### Bluegiga Access Server™ **Deliverables**

- Bluegiga Access Server™
- Power adapter
- RS-232 Cable
- Quick start guide

For more information about Bluegiga Technologies, please contact:

Bluegiga Technologies Oy Sinikalliontie 5 A 02630 Espoo, Finland Phone: +358 9 435 50 60 Fax: +358 9 435 50 660 www.bluegiga.com sales@bluegiga.com

© Bluegiga Technologies 2000-2009.

Bluegiga Technologies takes no responsibility for any mistakes that might appear in this document. It reserves the right to change devices, software or specifications detailed here at any time without notice, and does not make any commitment to update the information contained here. Bluegiga products are not authorised for any use as critical components in life support devices or systems.

Bluegiga Access Server, Access Point, iWRAP and WRAP THOR are trademarks of Bluegiga Technologies.
The *Bluetooth* trademark and logo are registered trademarks and

are owned by the Bluetooth SIG, Inc.