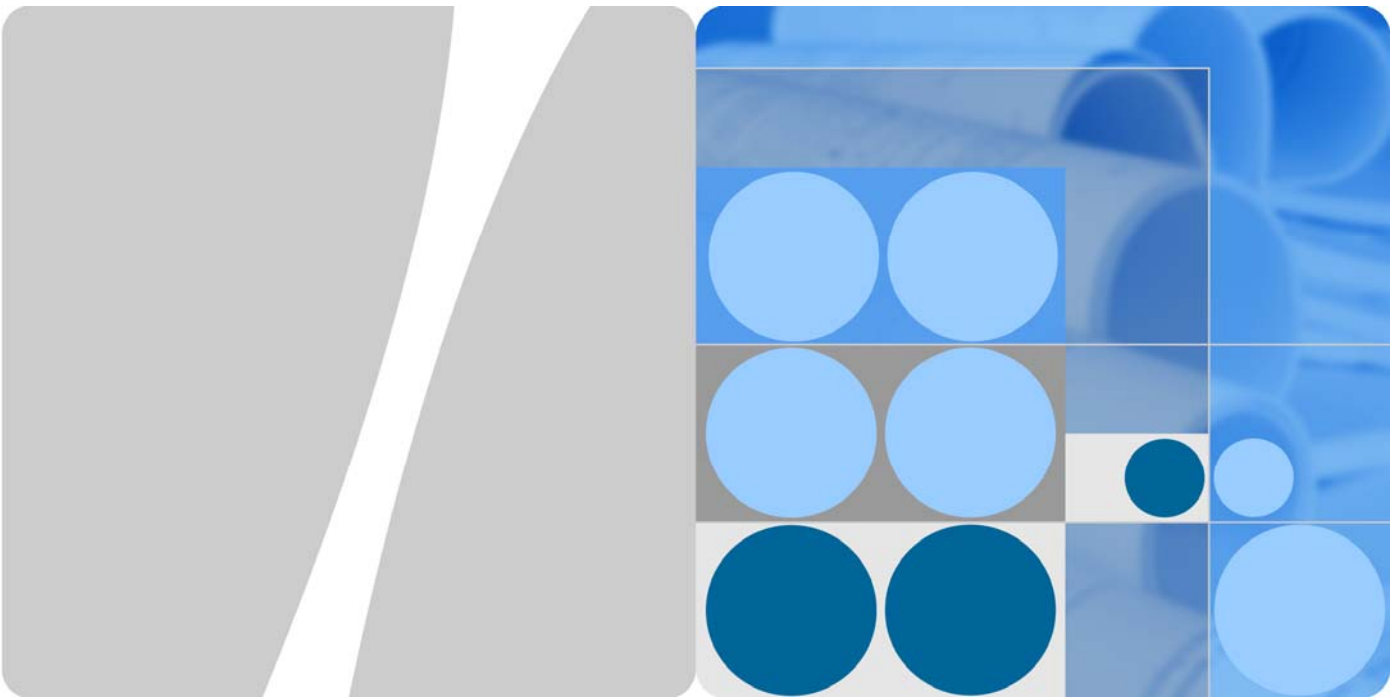


Product Description



HUAWEI B260a Wireless Gateway
V100R001

Issue 01
Date 2009-08-18

Huawei Technologies Co., Ltd. provides customers with comprehensive technical support and service. Please feel free to contact our local office or company headquarters.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: <http://www.huawei.com>

Email: mobile@huawei.com

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Some features of the product and its accessories described herein rely on the software installed, capacities and settings of local network, and may not be activated or may be limited by local network operators or network service providers, thus the descriptions herein may not exactly match the product or its accessories you purchase.

About This Document

Author

| | | | |
|-------------|----------------|------|------------|
| Prepared by | Li Chenlong | Date | 2009-08-18 |
| Reviewed by | FMC PDT | Date | 2009-08-18 |
| Approved by | Chen Tianxiong | Date | 2009-08-18 |

Summary

This document provides information for product features, main functions and services, technical specifications and technical references. .

This document includes:

| Chapter | Details |
|-----------------------------|-------------------------------------------------------------------------------|
| 1 Product Overview | Describes the appearance and main services of product |
| 2 Features | Describes the product features |
| 3 Technical Specifications | Describes the specifications of product hardware, software and user interface |
| 4 Services and Applications | Describes the main functions and applications |
| 5 System Structure | Describes the product system structure |
| 6 Technical References | Describes Standards and Communication Protocols of the DATACOM Products |
| 7 Packing List | Describes the devices and accessories of the product |

NOTE

The document is an invitation to offer but not an offer. It is intended to describe the general features and functions of products. The features and functions of certain products vary with requirements of customers.

History

| Issue | Details | Date | Author | Approved by |
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| | | | | |

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1 Product Overview

The HUAWEI B260a series wireless gateway (hereinafter referred to as B260a) is a 3G wireless gateway for family users and enterprise users. You can access the Internet through the gateway and network cable or wireless network. You can also connect with an analog telephone to provide the voice service.

B260a supports the following standards:

- High speed uplink packet access (HSUPA)
- High speed downlink packet access (HSDPA)
- Wideband code division multiple access (WCDMA)
- Global system for mobile communications (GSM)
- General packet radio service (GPRS)
- Enhanced data rates for global evolution (EDGE)

B260a supports wired and wireless network access and analog telephone access, and provides data routing service and analog telephone voice service. The supported service functions are as follows:

- Data service
- Voice function
- Security Service
- Local maintenance management function

B260a supports multiple network environments:

- HSUPA/HSDPA/WCDMA 1900M/850M
- GSM/GPRS/EDGE 1900M/1800M/900M/850M.

2 Features

The main features of B260a are listed as follows:

- Multiple network environments. The B260a supports HSUPA/HSDPA/WCDMA/GSM/GPRS/EDGE.
- High speed experience. Supports data services of maximum rate of 5.76Mbit/s HSUPA, 7.2Mbit/s HSDPA, 384kbit/s WCDMA, 236.8kbit/s EDGE, and 85.6kbit/s GPRS.
- Receiving diversity and load equalizer. Shows the maximum coverage of the network and exerts the highest value of the network.
- Built-in DHCP Server, DNS RELAY and NAT. Provides high-speed routing capability.
- Comprehensive and robust security services. Provides instant protection to block potential security risks and intrusion attempts.
- Supports Windows 2000, Windows XP, Windows Vista. Compatible with nearly all modern laptops and PCs.
- Intuitionistic and convenient Web-based management.
- Ultrathin and artful appearance. Satisfies the portability and removability of floating working.
- Built-in WCDMA and WLAN high gain antenna. Ensured performance and easy portability. It is optional to select an external antenna, which is to ensure the normal use when the signal strength is weak.
- User-friendly design of LED indicator. Easy to observe the status of equipment.

3 Technical Specifications

3.1 Hardware Specifications

Table 3-1 Technical specifications of the B260a

| Item | Description | |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Technical standard | WAN: HSUPA/HSDPA/WCDMA/EDGE/GPRS/GSM | |
| | LAN: IEEE 802.3/802.3u | |
| | WLAN: IEEE 802.11b/g | |
| Working frequency band | HSUPA/HSDPA/WCDMA/EDGE/GPRS/GSM | <ul style="list-style-type: none"> • HSDPA/WCDMA (UMTS FDD Band II) 1900M: 1850-1910MHz/1930-1990MHz(UL/DL) • HSDPA/WCDMA (UMTS FDD Band V) 850M: 824 -849 MHz/869 -894MHz (UL/DL) • EDGE/GPRS/GSM 1900M: 1850-1910MHz/1930-1990MHz (UL/DL) • EDGE/GPRS/GSM 1800M: 1710-1785MHz/1805-1880MHz (UL/DL) • EDGE/GPRS/GSM 900M: 880-915MHz/925-960MHz (UL/DL) • EDGE/GPRS/GSM 850M: 824-849MHz/869-894MHz (UL/DL) |
| | WLAN | <ul style="list-style-type: none"> • 2.401 GHz – 2.495 GHz |
| External interface | <ul style="list-style-type: none"> • Ethernet interface (RJ45): 10/100Base-TX • Telephone interface (RJ11) • Power interface (USB, B kind) • Reset button • External antenna interface (SMA) • Aerial switch | |

| | | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED indicator | <ul style="list-style-type: none"> • One power indicator • One WLAN indicator • One indicator for signal strength • One indicator for network mode • One LINK/ACTIVE indicator for Ethernet Interface | |
| Maximum transmit power | WCDMA | >24dBm (+1/-3) |
| | GSM | <ul style="list-style-type: none"> • 850/900M, 33dBm (+2/-2) • 1800/1900M, 30dBm (+2/-2) |
| | WLAN | <ul style="list-style-type: none"> • 802.11g: 16dBm (+2/-2) • 802.11b: 18dBm (+2/-2) |
| Receiving sensitivity | WCDMA | <ul style="list-style-type: none"> • Band V: dBm/3.84 MHz; -115<REFSENS>; -104.7<REF-or> • Band II: dBm/3.84 MHz; -115<REFSENS>; -104.7<REF-or> • Band I: dBm/3.84 MHz; -117<REFSENS>; -106.7<REF-or> |
| | GSM | 850/900/1800/1900M, better than -102dBm |
| | WLAN | <ul style="list-style-type: none"> -65 dBm@54Mbps, typical for 802.11g -76 dBm@11Mbps, typical for 802.11b -82 dBm@1Mbps, typical for 802.11b |
| Power consumption | <8 W | |
| AC/DC power supply | <ul style="list-style-type: none"> • AC: 90 V - 300 V • DC: 5 V, 2 A | |
| Dimensions (W×D×H) | 130 mm × 100 mm × 35 mm | |
| Weight | <250 g (The power supply adapter is not included) | |
| Temperature | <ul style="list-style-type: none"> • Working temperature: -10°C - +45°C • Storage temperature: -20°C - +70°C | |
| Humidity | 5% - 95% | |
| Placement | Horizontal, and wall-mounted | |

3.2 Antenna Specifications

3.2.1 Build-in Antenna

Table 3-2 GSM/WCDMA main antenna specifications

| Item | Description |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency | <ul style="list-style-type: none"> • 824 MHz - 960 MHz • 1710 MHz - 1990MHz • 2110 MHz - 2170MHz |
| Input impedance | 50 Ω |
| Standing wave ratio | < 3.0 (after being matched) All frequency points |
| H side gain | \geq 1dBi (horizontal level peak value) |
| Power capacity | 4W (average value, GSM/DCS/PCS/WCDMA signal) 40W (GSM/DCS/PCS/WCDMA pulse signal, with the width of 2 μ s - 8 μ s and duty ratio of 1% - 5%) |
| Polarization | Linear polarization (vertical) |

Table 3-3 WCDMA sub diversity antenna specifications

| Item | Description |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency | 869 - 960MHz 1805 - 1880MHz 2110 - 2170MHz |
| Input impedance | 50 Ω |
| Standing wave ratio | < 3.0 (after being matched, all frequency points) |
| Gain | \geq 0dBi (horizontal level peak value) |
| Power capacity | 4W (average value, GSM/DCS/PCS/WCDMA signal) 40W (GSM/DCS/PCS/WCDMA pulse signal, with the width of 2 μ s - 8 μ s and duty ratio of 1% - 5%) |
| Polarization | Linear polarization (vertical) |

Table 3-4 WLAN main diversity antenna specifications

| Item | Description |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Frequency | 2.4 GHz - 2.483 GHz |
| Input impedance | 50 Ω |
| Standing wave ratio | < 2.5 |
| H side gain | Horizontal level minimum value: >-2dBi Horizontal level average value: >-1dBi |
| Power capacity | 300mW (average value, WLAN signal) 3W (WLAN pulse signal, with the width of 2 μ s – 8 μ s and duty ratio of 1% – 5%) |
| Polarization | Linear polarization (vertical) |

3.2.2 External Antenna Specifications (Optional)

Table 3-5 External GSM/ WCDMA main diversity antenna specifications

| Item | Description |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Frequency | 824 - 960MHz 1710 - 1990MHz 2110 - 2170MHz |
| Input impedance | 50 Ω |
| Standing wave ratio | < 3 (after being matched, all frequency points) |
| H side gain | \geq 2dBi (horizontal level peak value) |
| Power capacity | 4W (average value, WCDMA signal) 100W (WCDMA pulse signal, with the width of 2 μ s – 8 μ s and duty ratio of 1% – 5%) |
| Polarization | Linear polarization (vertical) |
| Length of the connection cable | 1 m |
| Interface standard | SMA-C-J1.5 |

3.3 Software Specifications

Table 3-6 Software specifications

| Item | Description |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gateway | Router: <ul style="list-style-type: none"> • Supports static routing • Supports the default routing (the routing address is 0.0.0.0). You can set the WAN connection to the default routing to generate default routing table items • Supports the hybrid mode of bridging and routing |
| | Supports ARP |
| | Supports ICMP |
| | Supports DNS Relay |
| | NAT: <ul style="list-style-type: none"> • Supports NAT, NAPT (compliant with RFC2663, RFC3022 and RFC3027) • Supports fragment message identification for normal NAT • Supports ALG • Supports NAT traverse of FTP, MSN and NetMeeting • Supports NAT traverse of VPN related protocol (PPTP and L2TP) |
| DHCP Server: <ul style="list-style-type: none"> • The default IP addresses of the DHCP server is from 192.168.1.100 to 192.168.1.200. The default gateway address is 192.168.1.1 • The default DHCP lease is 24 hours • The DHCP Server can be enabled or disabled • The address pool of the DHCP server can be configured. • The lease can be configured • The IP address status can be displayed, such as the host name, MAC address, IP address, and remaining lease | |
| Data service | HSUPA: DL 7.2Mbit/s UL 5.76Mbit/s HSDPA: DL 7.2Mbit/s UL 384kbit/s WCDMA PS: DL 384kbit/s UL 384kbit/s WCDMA CS: DL 64kbit/s UL 64kbit/s EDGE: DL 236.8kbit/s UL 236.8kbit/s GPRS: DL 85.6kbit/s UL 85.6kbit/s GSM CS: DL 14.4kbit/s UL 14.4kbit/s |

| Item | Description |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>WLAN: 802.11g: 54Mbit/s, 48Mbit/s, 36Mbit/s, 24Mbit/s, 18M bit/s, 12Mbit/s, 9Mbit/s, 6Mbit/s 802.11b: 11Mbit/s, 5.5Mbit/s, 2Mbit/s, 1Mbit/s</p> |
| Firewall | <ul style="list-style-type: none"> • Firewall Switch • LAN MAC Filter • LAN IP Filter • Virtual Server • DMZ Service • UPnP Setting • Remote Web Management |
| LAN | 10Mbit/s and 100Mbit/s auto-negotiation |
| | MDI/MDIX auto-sensing |
| | IEEE802.3/802.3u is compatible |
| WLAN | SSID broadcast and hiding are supported. |
| | <p>Authentication:</p> <ul style="list-style-type: none"> • Open System authentication • Shared Key authentication • ASCII • 64/128-digit WEP encryption • 256-digit WPA-PSK/ WPA2-PSK encryption • TKIP ciphering algorithm • AES ciphering algorithm • TKIP and AES ciphering algorithm synchronously |
| | <p>MAC address authentication:</p> <ul style="list-style-type: none"> • White list • Black list • The preceding two lists cannot coexist. • Up to 16 MAC address items. |
| | <p>Ratio adjustment:</p> <ul style="list-style-type: none"> • Automatically • Manually |
| | <p>STA management:</p> <ul style="list-style-type: none"> • Supports inquiry of STA status • Supports limit of access users (up to 32 users) |

| Item | Description |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System requirement | CPU: Pentium 500 MHz or above Memory: 128 MB RAM or above Hard disk: 50 MB free disk space OS: Windows 2000/Windows XP/Windows Vista Display resolution: 800 × 600 or above (1024 × 768 is recommended) Internet Explorer: IE 6.0 or above/Firefox 1.5 or above/Netscape 8.0 or above |

3.4 User Interface Parameters

Table 3-7 User interface parameters

| Item | Description | |
|---------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gateway | Parameter configuration | <p>LAN:</p> <ul style="list-style-type: none"> • DHCP • IP address <p>WLAN:</p> <ul style="list-style-type: none"> • Wireless status • SSID • Mode (802.11 b/g) • Channel • Hidden SSID • Tx Rate • Authentication (Open System and Shared Key) • Security (WEP and WPA) • Access list (MAC) • Country <p>WAN:</p> <ul style="list-style-type: none"> • WAN connection profile, such as PPP user name, password, APN, and IP address • PPP dial-up mode • Network searching mode • Frequency band type • Connection type |

| Item | Description |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>Firewall:</p> <ul style="list-style-type: none"> • Firewall Switch • LAN MAC Filter • LAN IP Filter • Virtual Server • DMZ Service • UPnP Setting • Remote Web Management |
| Status | <ul style="list-style-type: none"> • Signal strength • Network type • Network connection status • SIM card status • Operator name, system mode, and so on |
| Other functions | <p>Network connection settings:</p> <ul style="list-style-type: none"> • Automatic network selection and registration • Manual network selection and registration <p>Selection of network connection types:</p> <ul style="list-style-type: none"> • 3G preferred • 2G preferred • 3G only • 2G only <p>PIN management:</p> <ul style="list-style-type: none"> • Enable/Disable PIN verification • Enter/Modify PIN • Unlock PIN |

4 Services and Applications

4.1 Wireless Gateway

4.1.1 Data Services

The B260a supports the high-speed data service. It is used for 3G wireless broadband network access. You can send and receive emails, surf the Internet.

Small-Size LAN

You can connect the B260a with a terminal device through the WLAN or one Ethernet interface in the Small Office Home Office (SOHO) to provide data services.

The B260a also supports the external concentrator, Ethernet switch, or router. To form a LAN with multiple PCs, you can extend the Ethernet interfaces through the concentrator or Ethernet switch.

Packet Switched Domain Data Service

The B260a supports several types of data services, such as HSUPA, HSDPA, WCDMA, EDGE, and GPRS. You can set the data service type in the networking settings on the Web management interface.

After the parameters are correctly configured on the Web management interface, the B260a creates normal data service in automatic, manual, or on demand mode, according to the dial-up type.

The B260a supports three connection types, such as the automatic, manual and on demand types.

- For the automatic type, the B260a creates the data service connection automatically after the B260a is normally started, if the network and the SIM card are available.
- For the manual type, you need to log in to the webpage and dial the number manually to create a connection after the B260a is normally started, if the network and the SIM card are available. If you want to disconnect from the network, you need to disconnect it manually.
- For the on demand type, the B260a creates the connection automatically if there is data accessing the Extranet. When the time of no traffic up to the setting Max Idle time, the connection disconnects automatically.

4.1.2 Security Service

The B260a supports comprehensive and robust security services: Firewall function and PIN protection mechanisms. These features together allow users to connect their computers to the Internet and simultaneously protect their computers from the security threats of the Internet.

Firewall Service

The B260a supports the following firewall services:

- Firewall Switch: Enable or disable the firewall on the network connection.
- LAN MAC Filter: Specify the Media Access Control (MAC) address to restrict network access.
- LAN IP Filter: Block specific IP address so that they cannot be accessed from computers in the local network.
- Virtual Server: Enable external computers to access WWW, FTP or other services provided by the LAN.
- DMZ Service: Allow one local computer to be exposed to the Internet. When you wish to use a special-purpose Internet service.
- UPnP Service: Allow other network users to control your gateway's network features to realize the intellectual interconnection.
- Remote Web Management: Allow the access and control of the gateway either from the home network or from the Internet.

User Authentication

The gateway supports the following user authentication protocols:

- No Encryption
- WEP
- WPA-PSK
- WPA2-PSK

PIN protection

If the PIN code protection is enabled, you need to validate the PIN code each time when you restart the gateway and log in to the management page.

4.2 Voice Services

The B260a provides a telephone interface, which can be used for connecting a telephone for the voice service. At most three extensions can be connected.

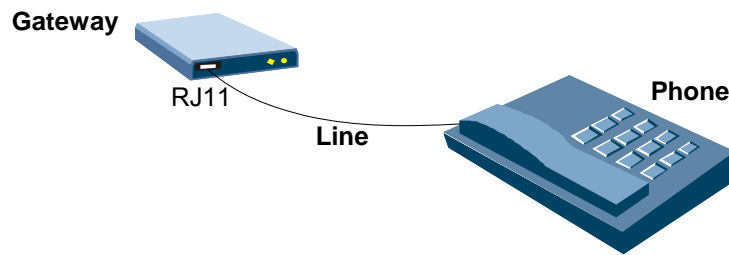


Figure 4-1 Connection between the B260a and phone

4.3 Local management and maintenance

The B260a supports local configuration to accomplish device management, network configuration and ensure normal and stable performance. .

5 System Structure

Figure 5-1 shows the system architecture.

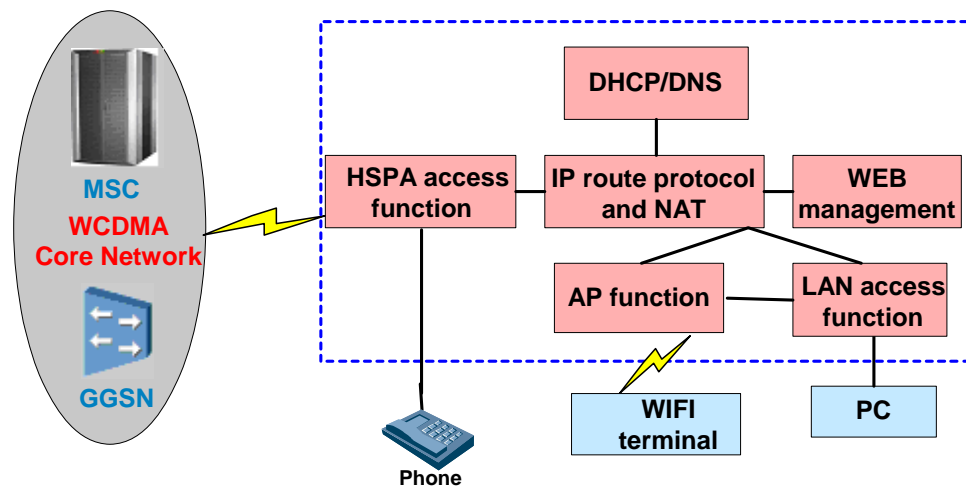


Figure 5-1 System architecture

The following describes modules shown in Figure 5-1.

- HSPA access: The B260a adopts the HSPA access technology at the WAN side. The B260a can access the 3G broadband packet-based network through the point-to-point protocol (PPP) dial-up.
- LAN access: One 10/100Mbit/s high-speed Ethernet interfaces are provided at the LAN side. The B260a provides the switching function for local networking and sharing of broadband network when it is connected to terminal devices.
- AP function: An 802.11 b/g-compliant WLAN AP interface is provided, used for wireless networking at home. The interface is compliant with the IEEE802.11 b/g standard and the WPA-PSK /WPA2-PSK/WEP security authentication.
- The voice service by directly connecting a telephone is supported.
- DHCP/DNS: The DHCP server dynamically allocates IP addresses to PCs. The DNS server parses domain names.
- Web management: You can configure, modify and query the configuration information of the B260a.

- Routing and NAT: High-speed routing capability. With the built-in NAT, the B260a, together with 3G terminals, can provide flexible broadband access solutions and networking schemes.

6 Technical References

6.1 Standards and Communication Protocols

6.1.1 Standards and Communication Protocols of the DATACOM Products

Table 6-1 Standards and communication protocols of the DATACOM products

| Item | Description |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical layer | RFC894 |
| PPP | RFC1915, RFC1962, RFC1994, RFC2433, RFC2759, RFC1332, RFC1877, RFC1471, RFC1570, RFC2484, RFC1717, RFC1934, RFC1990, RFC1334, RFC1974, RFC1661 |
| ARP | RFC826 |
| IP | RFC791, RFC1122, RFC1071, RFC1141, RFC1624, RFC792, RFC950, RFC1256 |
| ICMP | RFC792, RFC950, RFC1256 |
| TCP | RFC793 |
| UDP | RFC768 |
| DHCP | RFC1531, RFC1533 |
| NAT | RFC1631 |

6.1.2 Standards and Communication Protocols of the Wireless Um Interface

The wireless Um interface conforms to the WCDMA R99, R4, R5 standards.

Table 6-2 Standards and communication protocols of the wireless Um interface

| Item | Description |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Layer1 Specifications (Physical) | Physical Layer – General Description TS 25.201 (V3.1.0) Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD) TS 25.211 (V3.5.0) Multiplexing and Channel Coding (FDD) TS 25.212 (V3.5.0) Spreading and Modulation (FDD) TS 25.213 (V3.4.0) Physical Layer – Procedures (FDD) TS 25.214 (V3.5.0) Physical Layer – Measurements (FDD) TS 25.215 (V3.5.0) |
| Layer 2 Specifications (MAC/RLC) | MAC Protocol Specification TS 25.321 (V3.6.0) RLC Protocol Specification TS 25.322 (V3.5.0) |
| Layer 3 Specifications (RRC) | UE Interlayer Procedures in Connected Mode TS 25.303 (V3.6.0) UE Procedures in Idle Mode TS 25.304 (V3.5.0) RRC Protocol Specification TS 25.331 (V3.5.0) |
| Layer 3 NAS/Core Network (MCM) | Service accessibility TS 22.011(Release 5, June 2005) Non-Access-Stratum (NAS) functions related to Mobile Station (MS) in idle mode TS 23.122 (Release 5, June 2005) Mobile Radio Interface Signaling Layer 3-General Aspects TS 24.007 (Release 5, June 2005) Mobile Radio Interface Layer 3 Specification-Core Network TS 24.008 (Release 5, June 2005) PP SMS Support on Mobile Radio Interface TS24.011 (Release 5, June 2005) |
| GSM Protocol Specifications | Mobile Radio Interface Layer 3 Specification, Radio Resource Control Protocol TS 04.18 (V8.10.0) Mobile Station - Base Station System (MS - BSS) interface; Data Link (DL) Layer Specification TS 04.06 (V8.11.0) Digital Cellular Telecommunications System (Phase 2+); Multiplexing and Multiple Access on the Radio Path TS 05.02 (V8.9.0) Technical Specification Group GERAN; Channel coding TS 05.03 (V8.6.1) Digital Cellular Telecommunications System (Phase 2+); Radio Subsystem Link Control TS 05.08 (V8.a.0) Digital Cellular Telecommunications System (Phase 2+); Radio Subsystem Synchronization TS 05.10 (V8.8.0) |

| Item | Description |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GPRS Protocol Specifications | <p>Overall Description of the GPRS Radio Interface; stage 2 TS 3.64 (V8.8.0)</p> <p>Mobile Radio Interface Layer 3 Specification TS 04.08 (V8.0.0)</p> <p>Mobile Radio Interface Layer 3 Specification: Radio Resource Control Protocol TS 04.18 (V8.10.0)</p> <p>General Packet Radio Service (GPRS): Mobile Station (MS) – Base Station System (BSS) interface; Radio Link Control / Medium Access Control (RLC/MAC) protocol TS 04.60 (V8.10.0)</p> <p>Mobile Station - Serving GPRS Support Node (MS-SGSN) Logical Link Control (LLC) Layer Specification TS 04.64 (V8.6.0)</p> <p>Mobile Station - Serving GPRS Support Node (MS-SGSN); Sub-network Dependent Convergence Protocol (SNDCP) TS 04.65 (V8.1.0)</p> <p>Multiplexing and Multiple Access on the Radio Path TS 05.02 (V8.9.0)</p> <p>Channel Coding TS 05.03 (V8.6.1)</p> <p>Modulation TS 05.04 (V8.3.0)</p> <p>Radio Transmission and Reception TS 05.05 (V8.10.0)</p> <p>General Packet Radio Service (GPRS); Stage 1 TS 22.060 (V3.5.0)</p> <p>Mobile Execution Environment (MexE) TS 23.057 (V3.4.0)</p> <p>General Packet Radio Service (GPRS) Service description; stage 2 TS 23.060 (V8.8.0)</p> |
| General Specifications | <p>UE Capability Requirements TR 21.904 (V3.3.0)</p> <p>UE Radio Access Capabilities TR 25.926 (V3.2.0)</p> <p>Vocabulary TR 25.990 (V3.0.0)</p> <p>Radio Interface Protocol Architecture TS 25.301 (V3.6.0)</p> <p>Services Provided by the Physical Layer TS 25.302 (V3.7.0)</p> <p>Synchronization in UTRAN Stage 2 TS 25.402 (V3.4.0)</p> |
| Performance/ Test Specifications | <p>UE Radio Transmission and Reception (FDD) TS 25.101 (V3.5.0)</p> <p>Common Test Environments for User Equipment (UE) TS 34.108 (V3.2.0)</p> <p>Special Conformance Testing Functions TS 34.109 (V3.2.0)</p> <p>Terminal Conformance Specification TS 34.121 (V3.3.0)</p> <p>User Equipment (UE) Conformance Specification; Part 1: Protocol Conformance TS 34.123-1 (V3.2.0)</p> <p>User Equipment (UE) Conformance Specification; Part 2: Protocol Conformance TS 34.123-2 (V3.2.0)</p> |

| Item | Description |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Performance/ Test Specifications | Terminal Conformance Specification, Radio Transmission and Reception (FDD) TS 34.121 (V3.3.0) User Equipment (UE) Conformance Specification; Part 1: Protocol Conformance TS 34.123-1 (V3.2.0) S48 User Equipment (UE) Conformance Specification; Part 2: Implementation Conformance Statement (ICS) Specification TS 34.123-2 (V3.2.0) |
| USIM Specifications | SIM and IC Card Requirements TS 21.111 (V3.3.0) 3rd Gen. Partnership Proj Tech. Spec. Group Terminals; USIM App. Toolkit (USAT) TS 31.111 (V3.3.0) |

7 Packing List

Table 7-1 shows the devices and accessories of the B260a.

Table 7-1 Packing list

| Description | Quantity | Remarks |
|----------------------|----------|----------|
| Gateway | 1 | Standard |
| Power supply adapter | 1 | Standard |
| User Guide | 1 | Standard |
| Warranty card | 1 | Optional |
| 1.5m Ethernet cable | 1 | Optional |
| External battery | 1 | Optional |
| Phone cable | 1 | Optional |
| External Antenna | 1 | Optional |

A Acronyms and Abbreviations

| | |
|----------|-----------------------------------------|
| 3G | The Third Generation |
| A | |
| AC | Alternating Current |
| ARP | Address Resolution Protocol |
| AP | Access Point |
| APN | Access Point Name |
| C | |
| CDMA | Code Division Multiple Access |
| D | |
| DHCP | Dynamic Host Configuration Protocol |
| DNS | Domain Name Server |
| DL | down link, downlink |
| E | |
| EDGE | Enhanced Data rates for GSM Evolution |
| G | |
| GSM | Global System for Mobile communications |
| GPRS | General Packet Radio Service |
| GGSN | Gateway GPRS Support Node |
| H | |
| HSPA | High Speed Packet Access |
| HSDPA | High Speed Downlink Packet Access |
| HSUPA | High Speed Uplink Packet Access |
| HLR | Home Location Register |

| | |
|----------|--------------------------------------------|
| I | |
| IP | Internet Protocol |
| ICMP | Internet Control Message Protocol |
| L | |
| LAN | Local Area Network |
| LED | Light Emitting Diode |
| L2TP | Layer 2 Tunneling Protocol |
| M | |
| MSC | Mobile Switching Center |
| N | |
| NAT | Network Address Translation |
| P | |
| PSTN | Public Switched Telephone Network |
| POTS | Plain Old Telephone Service |
| PPTP | Point to Point Tunneling Protocol |
| R | |
| RTT | Radio Transmission Technology |
| S | |
| SOHO | Small Office Home Office |
| SCP | Service Control Point |
| SGSN | Serving GPRS Support Node |
| SDRAM | Synchronous Dynamic Random Access Memory |
| T | |
| TKIP | Temporal Key Integrity Protocol |
| U | |
| UMTS | Universal Mobile Telecommunications System |
| UL | up link, uplink |
| V | |
| VLR | Visitor Location Register |
| VPN | Virtual Private Network |
| W | |
| WAN | Wide Area Network |



| | |
|-------|-------------------|
| WCDMA | Wideband CDMA |
| WI-FI | Wireless Fidelity |