greenpacket

always best connected

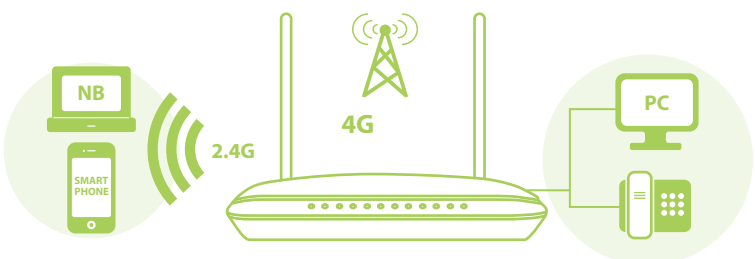
4G Indoor Gateway

Advanced indoor FDD/TD LTE router supports 3G fallback with optional voice service.

DATASHEET

DA-235/DA-725

www.greenpacket.com



DATASHEET

Highlights at a Glance

Greenpacket's DA series adopts Qualcomm's third generation mobile chipset which integrates global bands and supports multi radio access modes enabling great flexibility and wide adaptability to diverse sets.

- **Multi-band Access of FDD-LTE and TD-LTE**
- **Adaptive and Reliable Radio Access Modes**
- **Financial Benefits over CAPE on Voice Serice**

Multi-band FDD-LTE and TD-LTE

DA series can support multiple bands crossing both 4G and 3G. These spectrums are the most widely used and are prime bands for 4G deployments globally.
Under appropriate base station supports, DA series's speed of FDD-LTE is theoretically uplink to 50 Mbps and downlink speed up to 150 Mbps. Meanwhile, the uplink speed of TD-LTE is up to 30 Mbps with downlink speed up to 120 Mbps in theory. Overall, it results in a faster and more robust uplink and downlink performance.

Adaptive and Reliable Radio Access Mode

DA series supports both 4G radio access modes. Greenpacket's DA series automatically connects to the most reliable connection.
This feature enables great flexibility for operators to deploy on a wide range of settings. It also allows oper-ators who want to migrate to LTE markets with gradual transition with uninterrupted customer service.

Financial Benefits over CAPEX on Voice Serice

Enjoy the cost-benefits over voice service and share of network, DA series also equipped with RJ-11 Port. By which, users may simply connect to telephone line and enjoy low-cost and high-quality phone calls via network. Operators can take advantage of the voice service to maximize subscribers' wireless broadband investment.

What is more, Greenpacket's DA series can also support VoLTE upon request. Mobile 4G LTE broadband network bring VoLTE calls to HD voice, which will allow better audio fidelity, delivering in richer and warmer voice. Additionally, when VoLTE transition is completed, carrier networks will get rid of aging legacy technology, meaning that networks will be data-only which leads to the end of the complicated billing. In the future, carriers don't require text or voice minutes as everything will be dealt over data.

DA series also has 1 Giga RJ-45 Ethernet port. Users may enjoy streaming network via plug in line to the CPE easily. In addition, the network can be shared to more devices by Wi-Fi Access Point.

Technical Specification

ID Design

Dimension	200 mm*140 mm*30 mm
Weight	320 g

Interface

Power On / Off Switch	
RJ-11 Port	x1
Giga Ethernet Port	x1
Power Supply	Universal Range 100~240VAC, Output 12V1A DC
SIM Slot	
LED Indicators	x10
Reset Button	
WPS Button	
External Antenna	x2 (for LTE only)

Electrical & Mechanical

Power Supply	12V 1A AC
Temperature	0˚C ~ 40˚C (Operating), -20˚C ~ 60˚C (Storage)
Humidity	0% ~ 95% (Operating), 0% ~ 95% (Storage)

DATASHEET

Radio Specification

LTE Bands	DA-235 : B41 DA-725 : B41
LTE Standard	Comply with 3GPP Release 9
3G Bands	DA-235: B1/8 DA-725: B1/8
LTE Channel Bandwidth	10/20MHz (Other bandwidth like 5/15MHz can be supported by SW configuration)
LTE Output Power @ 25 oC	23dBm (3GPP compliant mode would be 3dBm ± 1dBm)
LTE Transmit Power Dynamic Range	Minimum 63dB
LTE Antenna Support Frequency	○ 2500MHz~2700MHz Antenna Peak Gain ○ • B41: 1dBi
LTE Receiver Sensitivity	Reference Sensitivity QPSK@10MHz ○ B41: Typical:-95MHz/Max:-99.9MHz ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
Wi-Fi Frequency	Ch 1~11
Wi-Fi Channel BW	20/40 MHz
Wi-Fi Antenna	Peak Gain: 2 dBi

Software Features

LTE	○ 3GPP Release 9 ○ UE Category 4 ○ 1TX/2RX ○ Full Band Search ○ APN Configuration (Manual APN Setting) ○ SIM Function (1.8V and 3V SIM and USIM Card) ○PIN/PUK Code ○ iRAT PS HO ○
Networking	○ IPv4 ○ IPv6 ○ IPv4/v6 Dual Stack ○ NAT Mode ○ NAS_Attach in WAN ○ DHCP Server in LAN (For NAT Mode, Supports Max. 253 Clients) ○ NTP Client ○ DNS Relay (For NAT Mode) ○ DDNS Client (For NAT Mode) ○ VPN Pass-through-IP Sec/PPTP/L2TP (For NAT Mode) ○ UPNP ○ HTTP(s) Server ○ ALG Support (FTP/SIP/etc...)
Device Management	○ Web Access (Remote/Local) ○ SNMP Agent ○ TR069 ○ FOTA Firmware Upgrade (IOT with Different Network)
Security	○ User Name/Password Configuration ○ L2/L3 Firewall • Basic firewall • Port Forwarding • Port trigger • DMZ • Remote WAN Ping • Remote Web Access Control
Wi-Fi	○ Network Name (SSID) ○ SSID Broadcast Enable ○ 802.11 Mode selection • 802.11b • 802.11g • 802.11n – 20/40MHz • 802.11b+g+n mode – This is the Factory Default option ○ Security (Detail Setting upon Changes) • Open (Unsecure) • WEP 64 – 5 ASCII characters or 10 HEX characters • WEP 128 – 13 ASCII characters or 26 HEX characters • WPA Personal / PSK (TKIP/AES) – ASCII string, 8 to 63 characters in length • WPA2 Personal / PSK (TKIP/AES) – ASCII string, 8 to 63 characters in length ○ Bandwidth selection: 20M, 40M, 20/40M
VoIP (Optional SW/HW Feature)	○ Protocol • SIP v2 (RFC 3261) • SDP (RFC2327) • RTP/RTCP(RFC1889/RFC 1890) ○ Codecs • G.711 • G.729 a/b ○ Echo Cancellation • G.168 ○ Caller ID ○ Call Hold ○ Outgoing Caller ID block ○ Anonymous Incoming Call Rejection ○ Call Waiting Indication (Tone) ○ Call Transfer ○ Call Forward ○ Call Waiting ○ Three-way Conference Call ○ Dial Plan Support ○ Do Not Disturb ○ Redial ○ Repeat Dialing on Busy ○ G.711 fax send and receive ○ T.38 fax send and receive ○ MWI and VMWI

DATASHEET

System/Debug Utility	◦ Software Reset Button ◦ Time Zone Configuration ◦ Network Debug: Ping, Traceroute ◦ System Log & Diagnostic& Monitoring ◦ Dual Image: FW Upgrade Fail Protection ◦ Firmware Verification

Regulation Compliance

DA-235	◦ CE : Compliant ◦ FCC : Upon Request
DA-725	◦ CE : In Plan ◦ FCC : Upon Request

Package Contents

DA Series	x1	
12V 1A AC Adaptor	x1 (Wall Mount)	
QIG	x1	**Detail Deliverables need to be Defined by Customer Agreement*

FCC Warning
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any inte rference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interferenceto radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
•Increase the separation between the equipment and receiver.
•Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
•Consult the dealer or an experienced radio/TV technician for help.
Radiation Exposure Statement
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.