



### General features

- Dual-Band UMTS/HSPA+
- Quad-Band GSM/GPRS/EDGE
- Signal strength and Status indicators (LED)
- Control via AT commands and GUI Interface
- SIM card (1.8V/3.0V interface)
- SMA External antenna connector
- Industrial grade components
- Automatic connection, Keep alive, Watchdog
- Transparent (TCP/UDP)
- WiFi SSID broadcast, Wireless 2.4GHz 300Mbps
- Wireless encryption : WPA, WPA2, WPA-PSK, WPA2-PSK
- Wireless MAC address filtering : support whitelist
- VLAN settings, Transmit power setting
- WDS function, Number of wireless clients limit, QoS:WMM
- Kick out weak signal device, disable weak signal device access
- System Management, WEB management
- System log, Restore factory settings
- Backup configuration, Import configuration
- Software upgrades
- GPS build-in (Optional)
- Data logger (Optional)
- Supply voltage measure, log and alarm (Optional)
- Temperature checking (Optional)

Approval certificate : EMI Standard Class B

### RF Specifications

- Dual-Band UMTS/HSPA+ 800(850)/2100MHz
- Quad-Band GSM/GPRS/EDGE 850/900/1800/1900MHz
- GPRS multi slot class 12
- EDGE multi slot class 12
- WCDMA 3GPP release 5

### Output power

- UMTS 850/2100 : 0.25W
- GSM 850/GSM900 : 2W
- DCS 1800/PCS1900 : 1W

### Specifications for GPS

- CELL assistant Location (No GPS)
- A-GPS : MS-Assisted, MS-Assisted
- Stand-alone GPS:QUALCOMM XTRA GPS mode
- GLONASS

### Ethernet

- 4 Ethernet Ports, 1 WAN Port (RJ45) Full Duplex
- 1 USB Port (AIRCARD Support)

### Communication Interface

- RS-232, RS485 Selectable
- RS-232 Serial interface (RJ45)
- Baud rate : 1200-115200bps
- Parity bits : 8N1, 8O1, 8E1

### Specifications for Data transfer

- HSPA+: Max.14.4Mbps(DL), Max.5.76Mbps(UL)
- WCDMA: Max.384Kbps(DL), Max.384Kbps(UL)
- EDGE: Max.236.8Kbps(DL), Max.118Kbps(UL)
- GPRS: Max.85.6Kbps(DL), Max.42.8Kbps(UL)
- CSD: GSM data rate 14.4Kbps
- WCDMA data rate 57.6Kbps
- WCDMA 64Kbps CSD for Video call

### Other features

- Data/SMS/MMS/Voice and Fax
- UDP,TCP/IP,FTP/FTPS/HTTP/HTTPS
- SMTP/PPP/POP3/DNS/FOTA/eCall

### Power Supply

- DC 10-30V 1A / AC 110-240V

### Environmental

- Operating temperature : 25°C to +70°C
- Storage temperature : 40°C to +85°C
- Operating relative humidity 5 to 95% RH
- Dimensions : 55 W x D 100 x H 130 mm.

### Mounting

- DIN rail mounting

**TECHNICAL SPECIFICATIONS**

Networks	3G/GPRS/EDGE	3G (850/900/1900/2100MHz) or GPRS/EDGE (900/1800MHz) class 10
	Authentication Protocol	CHAP/PAP/MS-CHAP/MS-CHAPV2/etc.
	APN Support	Access Point Name supported
Platform	CPU	MT7620A
	FLASH	16 Mbytes
	SDRAM	128 Mbytes
	Operating System	Embedded Linux System
External Memory	Interface	MICRO SD
SIM	Interface	Voltages Supported: 1.8V /3.0V
Antenna	Interface	SMA female connector, Impedance 50 Ohm
LAN Interface	Auto-Adaption	10M/100M Ethernet auto-adaptive, MDI/MDI-X auto crossover
	Isolation Protection	1.5KV network isolation transformer protection
	Electrostatic Discharge	8KV Air,4KV Contact
RS232/RS485	Data Rate	1,200bits~115,200bits
	Communication Parameters	Parity: None, Even, Odd, Space, Mark; Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2
	Protection	15KV ESD Protection
Online	Configuration	Serial, Telnet and Web configuration
	Upgrade	Remote upgrade and web upgrade, utilizing redundant backup mechanism for trouble-free upgrades
	Protection	15KV ESD Protection
Network Functions	Routing	Static routing
	Multi-Protocol Support	ICMP, IP, TCP, UDP, DHCP, PPP, ARP, Telnet, DNS, SSH, VRRP, HTTP, HTTPS, etc.
	Connection Supervision	Utilizing connection supervision mechanism, ensuring the device is always on-line
	NAT and PAT Port Mapping	Network Address Translation (NAT) and Port Address Translation (PAT), Denying illegitimate host access
	MAC Address Bundling	Allowing extranet user to access specific intranet port
	DDNS	Supports Dynamic DNS (Domain Name System)
Network Security	VPN (optional)	Supports standard IPSec (both support main mode and aggressive mode) Supports PPTP/L2TP/GRE/SSL VPN
	Firewall Strategy	State Packet Inspection(SPI), filtering multicast, filtering PING packet, preventing DoS attack, setting different firewall strategies,Port forwarding Filter,Access Control
Indicators	LED Status Indicators	LED Indicators for Signal strength LED Status Indicators for Power, Status, Network,WAN port, LAN Ports
Button Reset	Resetting	Factory Default / Reboot
Power Supply	Power Input	10-30 Vdc, polarity dependent, reverse polarity protection over-current protection, removable industrial terminal block
	Power Consumption	250mA @ 12V(max)
	Burst/Surge Protection	4KV/2KV
Environment	Temperature	Operating Temperature: -25 to +70°C Storage: -40 to +85°C
	Humidity	5% - 95%, non-condensing
	Protection Level	IP30
Safety Certification	Electric Strength	DC500V imposed on communication lines to ground and on power lines to ground, resistance >500MQ

**Approvals**

IEC61000-4-2 (Electrostatic Discharge) Level 3  
 IEC61000-4-3 (RF Electromagnetic Field Immunity) Level 3  
 IEC 1000-4-4 (Electric Fast Transient /Burst) Level 4  
 IEC 61000-4-5 (Surge) Level 3  
 IEC 61000-4-6 (RF conducted interference) Level 3  
 IEC61000-4-8 (Power frequency Magnetic) Level 3  
 IEC 61000-4-12 (Damped oscillation Immunity) Level 3

**TECH ADVANCE SOLUTION COMPANY LIMITED**  
 93/6 The Modern Group Tower, Moo 4, Chaengwattana Rd., Klong Gluar, Pak-Kred, Nonthaburi 1120 Thailand  
 Website: [www.Techadvancesolution.com](http://www.Techadvancesolution.com)  
 Email : tech.as936@gmail.com