

## KJ6520-ET Overview



KJ6520-ET , developed by ETUNG, is a series of industrial grade, field proven, smart wireless data terminal or as named as DTU (Data Terminal Unit).

Featured by reliability, flexible data communication mode and embedded protocols such as TCP/IP, MD- 609G can easily be integrated end to end wireless benefits into system integrators' solution offerings.

### Terminology

**Machine** - Many microprocessor-based machines provide a myriad of usage and status information available at local ports. This information can be accessed via proprietary, industry specific or open standard protocols either internally or external to the equipment.

**DTU or Router** - The DTU and router are more than just a wireless modem. They not only include TCP/IP stack for ease of communication over cellular network and the Internet, but also higher application level functions designated for M2M applications.

**DC** - Windows/Linux based Application software provides automated management and monitoring of remote DTU or Routers. This includes protocol interpretation, data gathering, re-configuration, reporting, alarm processing and notification. It is generic to many applications and can be tailored to customer and market specific needs.

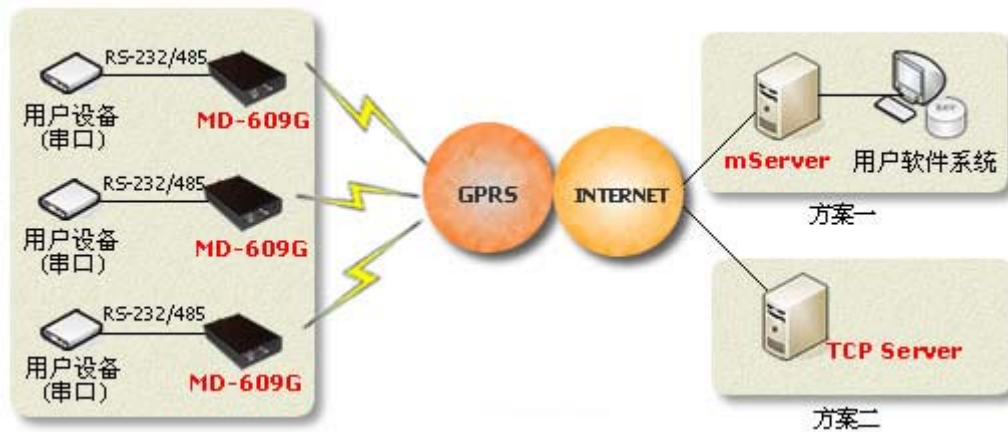
**DCC** - A role can access DC to send and receive data. Data Center Client Protocol, a very easy-to-implement protocol, is needed for a customer's PC to become a DCC. DCC concept leaves management and monitoring of remote DTU or Routers work to the generic DC while keeping the flexibility of bridging to customer's system.

**Always On Line Mode** - enables a DTU get connected at start-up and keep it always on line by supervision mechanism upon the data link to Data Center . It is ideal for applications where real time status is more important than regular cellular expense .

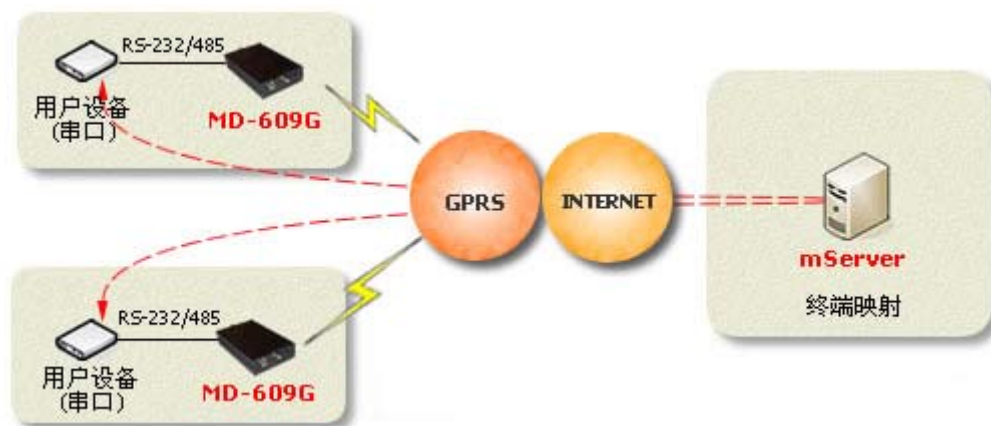
**On Demand Mode** - A data transmission control mode. It enables a DTU to start cellular

connection and data transfer upon user's data arriving. It cut the cellular expense to minimum.

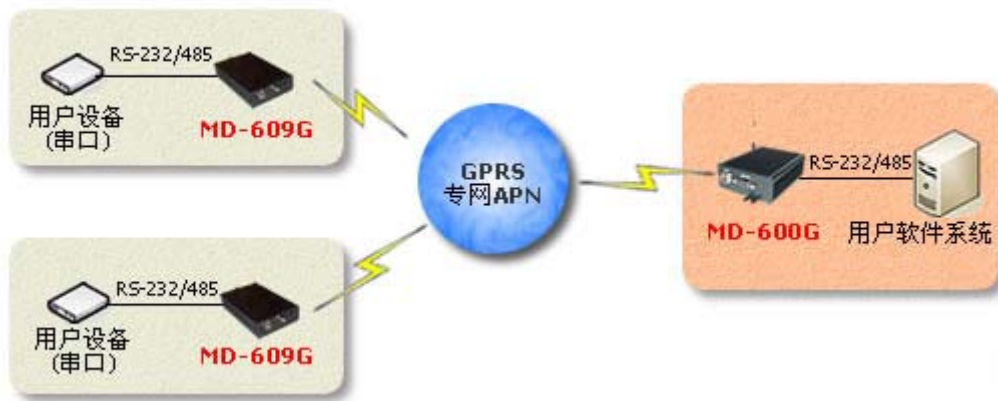
**Types of data links** - UDP, TCP are types of data links between a MD-609 DTU and the Data Center . They enable a DTU ideal for not only common “chat”, but also levels of serious “talks”. UDP data link's real-time and low transmission overhead features make it the best option for low latency data. TCP data link is needed for more reliable and accurate connection.



Clients-Server mode



Peer to Peer mode through mServer



Peer to Peer mode in APN

## Specifications

- Power: +5V~+36V DC  
anode inside and cathode outside
- Max work current: 360mA@+5V DC
- Idle current: 80mA@+5V DC
- Data interface: serial 232/485/422/TTL
- Working temperature: -25 °C - +70°C measurable
- Relative humidity: 95% @+40°C
- Size: 103x64x24mm

## Reliability

- Main CPU: 32 bit ARM processor
- Industrial grade components
- Watch-dog enabled
- Auto reconnect when data links falls
- Support transparent data transportation over UDP, TCP

## Data Transmission

- Flexible data link modes for varied applications
- Support transparent data transportation over UDP, TCP
- Support two data link modes - Always On Line, On Demand
- Support Dynamic Domain Name
- Address-IMEI mapping to save wireless bandwidth

## **Applications**

- Remote Utility Metering & Sub-Metering
- Vending Machines
- Elevators & Escalators
- Gaming Machines
- HVAC & Condition Monitoring
- Automated Electronic Signs
- Telemedicine
- In-vehicle Telematics