GSM MODEM

Instruction Manual

Abacus Electronics Pvt. Ltd.

Index

Introduction

Specification

Operating Instruction

Connection details

Introduction:

Company:

*" **M/S ABACUS ELECTRONICS PVT .LTD.** "* is an Indian
Company having register office in Pune (M.S). Its Four year old company
established in April 2006.

We are in design, development, and manufacturing of the
Embedded and VLSI based electronic system design.

Development Expertise and products Area:

1) Data Communication Products

2) Embedded Design

3) System Software

4) Device Networking Solution

5) Display Systems

Product Introduction:

More and more applications emerged with the rapid development of wireless data Services, such as vehicle navigation, remote monitoring, wireless Internet access, wireless POS, etc. Thus, more and more devices need to be able to do wireless communication. With this background, Abacus Electronics Pvt. Ltd.
develops its GSM/GPRS Modem. Users of this product can add wireless communication capability easily to their own products, and then, develop many applications.
The GSM/GPRS Modem mostly fits the need of data transfer, with SMS data Communication, GPRS data navigation, Circuit Switch / Data Connectivity, TCP/IP protocol etc. Because the easy setting up in SCM (Single Chip Micyoco), it is convenient for network data communication. The MOD 9001 GSM/GPRS Modem with small size, which fits both, embedded application and external peripheral equipment. The AT command set and RS232 interface will offer easy data connection without any extra circuit control.
Traditionally, the above applications use digital cellular, CDPD or other wire-line modem to do communication, and these technologies are of the disadvantages of high communication expense, limited communication range, dial before communications, etc. When we begin to use MOD 9001 GSM/GPRS Modem, all these problems disappeared. Please read this manual carefully before your installation, and please keep this manual for further reference

Specification:
Interfaces:

a. One Serial port, b. 3.3V TTL Voltage level /RS232 Voltage level optional,115200bps, 8,1,N, No hardware flow control
b. Power Supply upto 30 VDC 2Amp Peak
c. Antenna Interface
d. Network LED Indication
e. SIM Card Holder

Features:

- Supporting SMS data communication
- Supporting 900/1800/1900 MHz GSM Tri band, better signal quality
- Status lights indication

- Supporting AT Command Set
- Standard RS-232 serial port, easy to use
- Industrial standard design and quality guarantee

Data Specifications:

- GPRS Class 10 - max 85.6 kbps (downlink)
- Coding scheme 1, 2, 3, 4
- CSD up to 14.4 kbps
- PPP Stack
- Non transparent mode
- Point-to-point MO and MT
- Text and PDU mode

Specifications:

a. Operation temperature -25 - +60
b. Storage temperature-35 - +80
c. Humidity 0 - 95 non-condense
d. Receive Sensitivity-102dBm
e. Maximum Transmit Power1W
f. Dynamic range62dB

g. Frequency tolerance ≤±0.1ppm

h. Power supply 9V to 12V optional (customized by requirement)
i. Current standby 50mA work 300mA
j. Weight 150g

Operating Instruction

1. Insert SIM card at SIM card holder
2. Connect serial cable to DB9 of the modem as well as PC com port or Microcontroller serial port
3. Connect power supply adapter4. If modem is connected to PC used hyper terminal
5. If modem is connected to microcontroller fire AT command to modem (Used Given AT command s

Note: Make sure that all connections are properly
2) Modem Basic Operation: -

A. Module connection with Hyper Terminal.

1. Establish or Open Hyper Terminal from All Programs → Accessories →

Communications and setting up relevant parameters. Module baud rate is 115200.
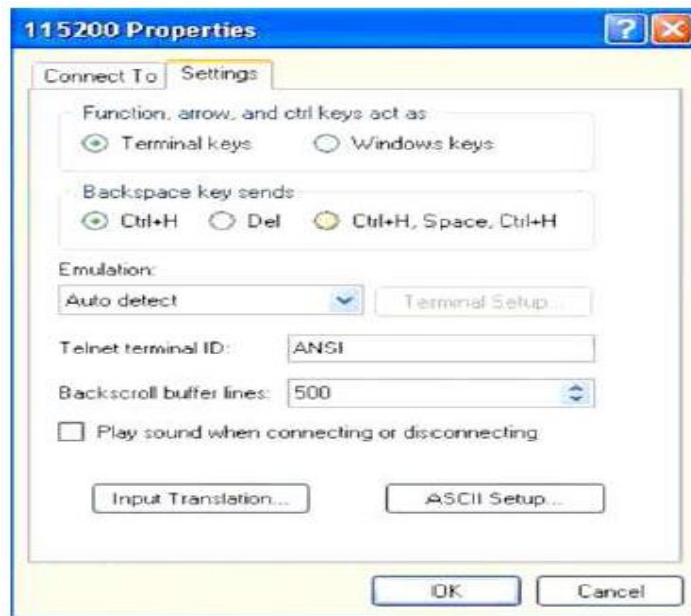(A). Establish connection.

(b). Setting up usage port

(c). Setting up port parameters.

(d). Setting up **property** in **File** Menu of **Hyper Terminal**

2. You can input word "AT" then press "Enter" key, it should be response word "OK" means work properly. **All commands are executed by pressing** "**Enter**" **key.**
All "AT" commands please refer the sim 300 AT command set manual.

Connection Details :

SIM card Holder

Warranty:
Six month from date of delivery.
No warranty for
1. Physical damage
2. Rework on PCB
3. Enclosure opening
4. GSM module Electrical damage