

Special Features of SMSD GSM Modem

Full custom design of GSM modem:

- Customer's application running on SMSD Modem
- ARM processor on-board, no need for external command processor
- Shape & form of the board definable to fit customer's design: rectangular, square, round
- SIM holder integrated or on external board
- Integrated SIM as option
- Selectable memory size to fit customer's application, maximum 64 MBytes FLASH and 32 MBytes SRAM

Multiple TCP/IP connections controlled by modem firmware, no intervention from control processor:

- Data transfer between SMSD Modem and Application Server without call set-up delay
- Suitable for a broad range of applications such as credit card validation, vending machines payment validation, smart metering, etc
- SMSD Modem appears like WEB browser on PC, fully transparent intelligent TCP/IP link
- Seamless IP address acquisition and simultaneous download/upload of data
- Simultaneous existence of 2 PDP Contexts
- SMSD Modem SW able to keep PDP context(s) active all the time
- Change of own IP address reported to customer's Application Server
- SMSD Modem SW can always keep an active Listening Socket, Application Server can directly reach the modem at any time without any limitation, Listening Socket solves access of GSM Modem on IP address known to server, no need for PUSH SMS
- SMSD Modem SW creates outgoing socket connection towards a remote IP when needed
- Simple tools for programming of APN related parameters, Application Server IP address / port and SW debugging
- No need to change anything on server side
- Simple communication protocol with external control processor, TLV, custom AT commands or similar

A stand-alone device named GSM IP LINK can be sold for universal data communication between a system with TCP/IP protocol what needs to see a server over GSM. In this case a "on-board control processor" should be added, in fact a microcontroller running TCP/IP protocol, DHCP client application and standard RJ45 connector. This product can be sold to wide range of applications. In the picture is shown a concept drawing of a product, GSM Gateway with power supply from LAN cable, no separate power supply needed.

Below there are 4 blocks as follows:

- GSM modem with TCP/IP gateway
- Microcontroller with LAN port,
- LAN power supply with battery charger and
- Battery

Similar device can be made with USB instead of LAN.

