A GSM/GPRS TELEMETRY MODEM
DELTA PLUS MOBILE II

Allows use of the mobile telephone network for Automatic Meter Reading (AMR), utility data collection and remote logging applications.

EASY TO INTERFACE TO YOUR EQUIPMENT
INTERCHANGEABLE WITH FIXED LINE MODEMS
REDUCED CONFIGURATION AND MAINTENANCE COSTS
IDEAL FOR USE IN THE UTILITY, VENDING AND SECURITY MARKETS

- Modern compatible communications data rates up to 9600bps
- Error correction including V110 (for ISDN/GSM connected Host)
- Always on GPRS capability as standard
- Industry standard 25 way D-type socket interface
- Advanced Super Caps allow no battery operation (Std Product)
- Flexible power supply of 6V to 14VDC
- Standby mode with current drain of <50mW
- Typical average operating power of <500mW
- Plug in compatibility with other Delta Plus and many other modems
- Local or remote antenna
- Dimensionally compact and cost effective

The Delta Plus Mobile II is a new member of ASLH’s well established and proven range of Delta Plus telemetry modems.

The Delta Plus Mobile II allows access to remote data via the public mobile telephone networks. The industry standard data port allows the unit to be connected to equipment in place of a fixed line modem. The flexible input power supply requirements further enhance the ease of use.

Whilst the replacement of batteries in consumer GSM phones is reluctantly accepted, it is not economic in many industrial applications due to problems of access and cost. This makes low operating power vital.

The Delta Plus Mobile II has been designed with that requirement paramount. Full power is only used when online. In low power standby mode it will still action commands from the host e.g. to dial or to answer a call.

In standby mode, at 6V the Delta Plus Mobile II consumes <50mW rising to a maximum of 0.5W when communicating. This allows the use of advanced Super Cap technology to eliminate the need for batteries and their associated problems.

For maximum compatibility and ease of use the unit has been designed to operate like a normal modem. There is no need to understand additional GSM network specific operations. Even when operating in GPRS mode, once installed, it acts like a leased line modem.

To reduce transmission times, the Delta Plus Mobile II can be used in V110 mode making and receiving calls to and from hosts connected using ISDN or GSM rather than standard telephone modems.

A suitable antenna can be fitted to the unit’s flying lead or mounted remotely via an extension cable if required.

Installation is further simplified, as the unit is so light that it can be mounted via its 25 way “D” connector.

Naturally, the Delta Plus Mobile II includes watchdog and power brown out detection to maximize high reliability of operation.

The Delta Plus Mobile II is ideal for use with electronic electricity meters where it is small enough to fit under the terminal cover.

Alternately the unit can be used for data logging applications where the low standby current requirements will allow a long battery life.
SPECIFICATION

Data rates & standards  V22 (1200bps), V22bis (2400bps), V32 (9600bps) - [V32bis (14,400bps) battery version only]

GPRS Protocol  Supports TCP/IP stack Class 10 and ASL high efficiency telemetry protocols (ATP)

Network compatibility  Quad band for use on GSM and GPRS (Class B 4+1) networks at 850/900/1800/1900MHz

SIM card  Secure mounting with easy access ‘push - push’ style SIM holder

Error Correction/ Data Compression  V42, V42bis standards for modem and V110 for ISDN and GSM hosted applications

Power supply  Powered from the host data port. +6V to +14 V dc
Delta Plus Mobile II with Super Caps and no battery: 50mW standby, 500mW communicating - ASLH306.
Delta Plus Mobile II with Super Caps and a lithium Ion battery: 30mW standby, 1W communicating - ASLH306BATT

Enclosure  Custom moulded plastic housing, size - 61x57x24mm.

Weight  70g

Environmental conditions  -20 to +55°C operating; –20 to +70°C storage. Humidity 0-95% non-condensing

Control of functions  By ‘AT’ compatible command subset

Auto dial/answer  Under ‘AT’ command control. Auto answer with Call Indicate

Antenna connector  SMA bulkhead connector on 130mm flying lead

Data port  RS232 (V24/28) asynchronous serial port supporting RXD, TXD, DCD, DTR, RTS and CTS

Data port connector  Integral 25 way ’D’ socket. Standard pinout with power on pin 7 – ve, pin 9 and 15 + ve

Remote configuration  By the use of Hyper Terminal or any suitable terminal emulation package for access

Approvals  The product conforms to: 3GPP TS 51.010-1, EN60950, R&TTE directive 99/5/EC

Additional services  For more communications options see the separate data sheets for the other communications modules that are in the Delta Plus family. ASLH is also able to offer modems with customized configurations, tailored to specific customer’s requirements as well as fully custom communications products. Please enquire for full details.

ASLH’s policy is to upgrade and improve its products. The right is reserved to change these specifications without notice. ASLH306 May/12