

Solutions for
GSM based
Telemetry

WatchLink GSM

WL-50B GSM Base

WatchLink GSM versatile WL-50B base unit can remotely monitor and control various devices over the GSM Network using your own mobile phone

The flexible configuration of the WL-50B unit allows it to be used in a variety of applications including remote sensing of switches, sensors and security devices and also control of equipment such as lights, pumps and actuators. Using a modern quad band GSM engine, the WL-50B comes in a robust waterproof enclosure that includes robust user connectors and Mains rated power relays.

The unit can be programmed with its own configuration using an easy to use computer program. Alarm messages from activated inputs are sent as specific SMS text messages to pre-defined mobile phone numbers and the status of the unit can be interrogated remotely. The high current output Relays can be switched ON or OFF remotely using SMS text messages from authorised mobile phone users.

PrePaid SIM cards can be used for most applications. The unit supports GSM standards that are in use worldwide. The WL-50B unit will especially appeal to Security and Automation Integrators who want to add wireless connectivity to their remote assets and products.

Technical Features

The WL-50B includes four Industrial grade Inputs and two Outputs by using isolated digital inputs and high current Mains rated Relay outputs. The user connectors are easy accessible screw terminals or plug in connectors.

All the inputs have visual indication with test switches for alarm simulation. The status of the Relays are indicated visually.

Depending on the options included, you can also add a sensitive GPS module and an RS485 port for monitoring and controlling external PLC devices.

The WL-50B unit is ready to go for your Telemetry applications using its multiple digital inputs and outputs minimizing the need for extra hardware in the remote device.

The wide choice of wireless bearers supported by the WL-50B unit allows the choice of the most appropriate one for the application. The bearers include 3G, GPRS, EDGE, HSCSD, CSD and GSM. EDGE and 3G can provide increased data throughput for use in compressed video applications and MMS.



With the WL-50B unit, your application will be ready for evolving needs in the fast growing markets of M2M

KEY FEATURES

- Ready-to-Go for many SMS controlled I/O applications
- Industrial grade Inputs and Outputs using Isolators and Relays
- Visual indication of all Inputs and Outputs and Test Switches
- Compact IP55 rated Enclosure which can be wall mounted
- Quad band GSM engine which supports GSM/GPRS communications
- Simple setup of I/O and M2M parameters with *Configurator* program
- Easy accessible and robust connectors for external devices

Applications

- Remote Pump Monitoring
- Traffic monitoring and control
- Environmental Monitoring
- Remote assets Security
- Home/Office Automation
- Emergency Call stations
- Vehicle Tracking
- Access control

TECHNICAL SPECIFICATIONS

MAIN FEATURES

GSM ENGINE

- Quad band GSM 900/1800/850/1900 MHz
- GSM + GPRS Class 10 Wireless bearers
- Integrated ARM9 processor and 16Mb Flash memory
- Integrated TCP/IP stack and Open AT OS
- Various interfaces such as serial, SPI and I2C
- Real Time clock support
- Rechargeable battery support

STANDARD PERIPHERALS

- 4 digital inputs
- 2 Relay outputs
- RS232 Serial port
- Network Status Indications and Test function
- SIM Card Connector

OPTIONAL PERIPHERALS

- 20 channel GPS receiver
- Dual buffered analogue inputs
- TTL serial port
- RS485/USB port
- Expansion connectors
- Rechargeable battery backup

SOFTWARE INTERFACES & DEVELOPMENT

SOFTWARE OPERATING MODES :

- Espresso Software (Windows and MAC)
- C or Lua code development using Eclipse IDE or M2M Studio from Wavecom
- AT Commands via Hyperterminal or external serial device

ELECTRICAL CHARACTERISTICS

<i>Input Power Consumption</i>	9-16V DC Input supply, 12V Nominal Standby average 30mA, GPRS max RMS 630mA, Peak 2A
<i>Serial</i>	3.3V/5V TTL, ESD protected. RS232.
<i>RF Power</i>	2W(max) in 900MHz, 1W in 1800MHz

PHYSICAL CHARACTERISTICS

<i>Size</i>	170 x 120 x 55 mm (L x B x H)
<i>IP Rating</i>	IP55
<i>Mounting</i>	Wall Mount or Panel Mount.
<i>Type</i>	Polycarbonate plastic with clear lid. Supplied with PG11 glands or Bushings

ENVIRONMENTAL SPECIFICATIONS

<i>Recommended Operating Temp</i>	0 ... +60 deg C
<i>Storage Temperature</i>	-10 ... +70 deg C
<i>Relative Humidity range</i>	5 ... 95% non-condensing
<i>Approvals</i>	CE and RoHS compliant

INTERFACE CHARACTERISTICS

<i>Digital In</i>	4 x isolated inputs for volt free contact or voltage ON threshold > 3.5V ... 16V
<i>Digital Out</i>	2 x Mains rated Relays NO and NC Contacts rated at 230V/5A.
<i>Analogue In</i>	2 x buffered and protected inputs (10bit resolution) 1 x 0-5V input 1 x Thermistor sensor input
<i>Serial</i>	1 x serial RS232 port with handshaking (used for programming and external devices) 1 x TTL(3.3V or 5V) serial port with handshaking 1 x RS485 2-wire port/USB port
<i>External Power</i>	2.1 mm DC socket and via screw terminal Rechargeable battery
<i>SIM Card</i>	Drawer style SIM card connector with card presence detector
<i>Test function</i>	Momentary push switch to activate one input
<i>Status</i>	1 x red LED for network status
<i>Antenna</i>	SMA connector (GSM) MMCX connector (GPS)

ORDERING INFORMATION & ACCESSORIES

Basic Unit

4 inputs, 2 Relay outputs, Serial Port RS232, Test switch, Status LED, IP55 enclosure
[Order Code: WL-50BS]

Other Options

Analogue Inputs, GPS receiver, RS485 interface, Rechargeable battery

Accessories

External GSM/GPS antennae, 12V Power Supply, interface cables

* Please visit our website www.watchlinkgsm.com for more information on products, accessories & applications.

WatchLink GSM

The Stables, Huntsfield, Dooradoyle,
Limerick, Ireland

Tel : +353-61-228562
E-mail : sales@watchlinkgsm.com
Web : www.watchlinkgsm.com