## Multi Log SMS<sup>™</sup>

## INTRODUCTION

MultiLogSMS<sup>™</sup> is a very versatile telemetry logger for applications where Telephone lines are costly or prohibitive. This sheet describes one or two input versions for monitoring any combination of digital or analogue signals. (4 channel versions available)

MultiLogSMS<sup>™</sup> is completely waterproof, submersible and battery powered and will require no maintenance for at least five years.

 $\mathsf{MultiLogSMS}^{\mathsf{TM}} \ \text{ can successfully operate in poor}$ signal strenth locations where conventional GSM data communications may be difficult.

A dual band (900MHz /1800MHz) cellular SMS telemetry module, fitted internally, offers full coverage with most cellular communications network providers worldwide.

2-way communications options with SMS, with comprehensive alarm capabilities.

Portable applications requiring periodic relocation can now have telemetry links to the office, without the need to have multiple telephone lines installed.



## **TYPICAL APPLICATIONS**

District and Zone Monitoring MultiLogSMS<sup>™</sup> is ideal for monitoring flow, pressure and or water quality parameters to assess demand, leakage and conformance

*Network Analysis Investigations* MultiLogSMS<sup>TM</sup> can be used to perform dynamic flow & pressure analysis of network models.

Key Account Customers MultiLogSMS  $^{\rm TM}$  confirms levels of service and enables extra data to be provided to key customers.

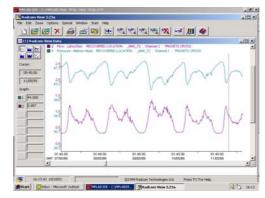
### ADVANCED DESIGN

MultiLogSMS<sup>™</sup> loggers are generally supplied with one or two inputs of any type. The most popular version includes both a digital flow input and an internal pressure sensor. Also available are various external pressure sensors, voltage or 4-20mA inputs. Special versions extend the applications to four inputs or Ultrasonic level sensing capability.

The external cellular antenna can be easily positioned to obtain optimum signal strength in difficult reception locations. The antenna will operate below metal manhole covers, or can be routed through conduit to road side pillars, thereby ensuring that the logger is out of sight to avoid unauthorised access / vandalism problems etc.

MultiLogSMS<sup>™</sup> logger incorporates as standard advanced data compression techniques that will enable one daily SMS message to download data from two channels of 15 minute sample rate recordings.

All of RS Hydro's data loggers and controllers are compatible with RadLog for Windows™, the industry-standard for data trending, reporting, analysis and archiving



Typical Rad Log display showing Flow and Pressure  $\mathcal{T}_{M}$ channels from MultiLogSMS

# Multi Log SMS™

## **TECHNICAL DATA**

|                               | Digital                        | Uni- or bi-directional pulse.<br>Suitable for Reed switch or PD4 flow sensors.  |
|-------------------------------|--------------------------------|---|
| Sensor Input<br>Options       | Analogue                       | Up to 128 pulses per second.  |
|                               |                                | Internal Pressure Transducer 0-20 bar / 0-200 metres head / 0-300 psig, accuracy $\pm 0.25\%$   |
|                               |                                | External Pressure Transducer (volt) or Transmitter (mA)<br>0-20 bar / 0-200 metres head / 0-300 psig, accuracy ±0.1%  |
|                               |                                | 4-20mA  |
| Logging<br>Features           |                                | 0-1v, 1-5v, or 0-100mVolt.  |
|                               |                                | Recording 48,720 readings.<br>(memory expandable to 245,280 readings on request)  |
|                               | Memory                         | Can be programmed to read continuously (cyclic mode) or for a specific period of time (block).  |
|                               | Frequency                      | 15 minute sample rate.  |
|                               | Alarms                         | Minimum or maximum threshold alarm with persistence factor per<br>channel. 7 Alarms per logger. Each alarm out comment field 16<br>characters. Can be programmed to auto dial up to 4 telephone<br>numbers on alarm |
|                               | Logger ID                      | Up to 8 alphanumeric characters – can be programmed with GIS number. Also readable factory set serial number in firmware.   |
|                               | Site ID                        | Up to 127 alphanumeric characters.  |
|                               | Clock                          | On board 24 hour real time clock with date facility.  |
| Communications                | Count & Event<br>Logging Modes | Count and Event logging modes   |
|                               | Serial                         | RS232 by MIL connector for connection to Rad Link hand held programming and data collection unit, laptop PC or desktop PC. Programmable up to 19,200 Baud.  |
|                               | SMS communications             | Typically 1x SMS text message per day to transmit<br>1 or 2 channels of compressed data at 15 minute sample rate  |
| Physical                      | Cellular module                | 2-way Dual Band Cellular modem, 900/1800MHz.<br>Optional power up time window to receive instructions by SMS  |
|                               | Dimensions                     | 235H x 145W x 80D mm (9.3"H x 5.7"W x 3.2" D)   |
|                               | Construction                   | Die-cast aluminium enclosure, powdercoat spray painted  |
|                               | Weight                         | 3.6 Kg (7.9 lb)   |
|                               | Operating<br>temperature       | -20 to +70°C (-5 to +160°F)   |
|                               | Ingress protection             | IP68 submersible  |
|                               | Power                          | Lithium-ion cell operational for 5 years under normal operating conditions. Warranted for continuous operation of up to five years. Low battery alarm in data packet when downloaded.                               |
| R D L 6 6 L / i/p1 i/p2 / SMS |                                |   |
| RDL                           | 6 6 I                          | _ / <sup>i/p 1</sup> <sup>i/p 2</sup> / SMS   |

1= 1 input 2= 2 inputs

1= digital pulse input 2= 0-1 volt input 3= external pressure 5= 4-20mA 6= internal pressure

Note. Other  $\mathsf{MultiLogSMS}^{\mathsf{TM}}$  logger versions are also available with :-

4 input channels, Extended 2 way communications Ultrasonic level sensing capability "SonicSens"

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