

# microSpider *lite*<sup>TM</sup>

## Compact 4G low power logging and alarm system

Halytech **microSpider lite** is an ultra low power multi-channel data logger capable of controlling outputs, generating alarms and automatic reporting. Its compact IP68 enclosure houses all components including long life batteries and modem, making it suitable for installation in confined spaces. The **microSpider lite** can communicate via SMS, email, internet and more.

The "M" variant features even lower power consumption by utilising the latest LTE Cat M1 communication technology.

The **microSpider lite** has an easy to use web interface with built in help. It can be used with most computers and operating systems without the need to install any software.

### Features

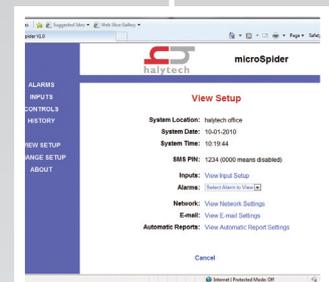
- Complete system includes:
  - Compact IP 68 enclosure with built-in mounting system
  - 2 analogue + 2 digital multi-type inputs
  - 2 digital outputs for sensor / accessory control
  - Programmable low power sensor power supply
  - Ethernet Interface
  - Integrated LTE (4G) with 3G fallback or LTE Cat M1 modem
  - Internal or external antenna
  - Huge 400,000 record non-volatile data memory
- User configurable inputs, outputs and alarms
- Connects to any computer with a browser and LAN port
- Download data as a CSV file compatible with Excel
- Alarms via SMS / email / Twitter
- Automatic CSV reports via email / FTP / HTTP
- Ultra low power design - up to 10 year life with built-in batteries
- Simple and inexpensive to install - no external enclosures, batteries or solar panels
- Optional direct remote access from any PC, tablet or smart phone
- Enterprise level management - automatically manage 1000's of microSpider lite
- Optional DNP3 protocol support
- Designed and manufactured in Australia

### Typical Applications

- Automatic Meter Reading (AMR)
- Environmental Monitoring
- Agriculture
- Traffic Monitoring
- Water Treatment
- Irrigation and Bore Monitoring



Complete Compact Unit



Simple Access With Any Browser



Remote Deployment  
Built-in LTE (4G)

# Specifications

## General

<b>Dimensions (approx)</b>	165(W) x 80(H) x 85 (D) mm
<b>Weight (approx)</b>	800 g
<b>Enclosure rating</b>	IP - 68
<b>Enclosure material</b>	ABS
<b>Mounting system</b>	Integrated into enclosure
<b>Operating temperature</b>	-5 to +50 degrees Celsius
<b>Factory warranty</b>	12 months parts and labour return to base

## Power Supply

<b>Battery</b>	Integrated long life lithium batteries with up to 10 years battery life (depending on application) Optional second battery pack
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## Inputs

<b>Standard inputs</b>	Up to 2 analogue + 2 digital + 3 system inputs
<b>Input names</b>	User definable
<b>Connector</b>	Waterproof - custom mating leads available

## Analogue Inputs

<b>Resolution</b>	12 bits
<b>Calibration</b>	2 - point, 1-point or manual
<b>Units of measure</b>	User definable
<b>Sampling period</b>	User definable, 1 second minimum
<b>Type</b>	4 - 20 mA with external resistor 0 - 2.4V, common ground 0 - 5V, common ground 0 - 10V, common ground

## Digital Inputs

<b>Input range</b>	0 -12V DC Voltage or voltage-free switch contact
<b>Type</b>	User selectable: switch, event (rainfall), counter, utility meter, quadrature, difference

## Counter / Event Inputs

<b>Minimum pulse width</b>	5 ms
<b>Maximum frequency</b>	100 Hz
<b>Range</b>	0 - 999,999

## System Inputs

<b>Type</b>	System temperature Battery voltage Internal moisture sensor
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## Outputs

<b>Number of outputs</b>	2
<b>Type</b>	1 x Open collector for accessory control 1 x Low power sensor supply (3.3V or 5V)
<b>Output names</b>	User definable
<b>Output control</b>	Via browser, alarms and/or sensor warmup
<b>Connector</b>	Waterproof - custom mating leads available

## Alarms

<b>Number of alarms</b>	16
<b>Type</b>	SMS, email transmission and/or Twitter
<b>Trigger</b>	User definable input and trigger point
<b>SMS / email text</b>	1 per alarm, user definable
<b># of phone numbers</b>	3 per alarm, user definable
<b># of email addresses</b>	3 per alarm, user definable
<b>Alarm names</b>	User definable

## Logger

<b>Capacity</b>	approximately 400,000 records
<b>Storage memory</b>	Non-volatile FLASH
<b>Time resolution</b>	1 second
<b>Time synchronisation</b>	Automatic by NTP
<b>Report format</b>	CSV file
<b>Automatic reporting</b>	Directly to user by e-mail / FTP / HTTP

## Communication Interfaces

<b>Ethernet</b>	10/100 base-T with LANlink Cable
<b>Mobile communications</b>	Standard model - built-in 4G with 3G fallback "M" model - LTE Cat M1
<b>Antenna</b>	Standard - internal antenna Optional - external antenna
<b>Internet connectivity</b>	Mobile communications LAN (with LANlink Cable)

## Optional Assesories

<b>LANlink Cable</b>
<b>Spare Battery Packs</b>
<b>Custom Input and Output Cables</b>
<b>Universal Pipe Mounting Bracket</b>

All specifications are subject to change without notice. Published 8 November 2018.



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