## microSpider lite

### 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 / NBIoT 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.



**Complete Compact Unit** 

### **Features**

Complete system includes:

Compact IP 68 enclosure with built-in mounting system

Standard configuration: 2 analogue + 2 digital multi-type inputs

Modbus Option: up to 16 Modbus + 1 analogue + 1 digital input

2 digital outputs for sensor / accessory control

Programmable low power sensor power supply

**Ethernet Interface** 

Integrated LTE (4G) or LTE Cat M1 / NBIoT modem

Internal or external antenna

Huge 400,000 record non-volatile data memory

- User configurable inputs, outputs and alarms
- Connects to any computer, smart phone or tablet through Wi-Fi or Ethernet
- 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

# Simple Access With Any

**Browser** 



Remote Deployment Built-in LTE (4G)

### **Typical Applications**

- Automatic Meter Reading (AMR)
- Environmental Monitoring
- Agriculture

- Traffic Monitoring
- Water Treatment
- Irrigation and Bore Monitoring



### **Specifications**

#### **General**

 Dimensions (approx)
 165(W) x 80(H) x 85 (D) mm

 Weight (approx)
 800 g

 Enclosure rating
 IP - 68

Enclosure material ABS

Mounting system Integrated into enclosure
Operating temperature -5 to +50 degrees Celsius

Factory warranty 12 months parts and labour return to base

**Power Supply** 

Battery Integrated long life lithium batteries

with up to 10 years battery life (depending on application)
Optional second battery pack

**Inputs** 

Input names

Standard inputs
Up to 2 analogue + 2 digital + 3 system inputs
Modbus Option
Up to 16 Modbus + 1 analogue + 1 digital + 3

system inputs
User definable

Connector Waterproof - custom mating leads available

**Analogue Inputs** 

Resolution 12 bits
Calibration 2 - point, 1-point or manual

Units of measure User definable

Sampling period User definable, 1 second minimum

Type 4 - 20 mA with external resistor 0 - 2.4V, common ground 0 - 5V, common ground 0 - 10V, common ground

**Digital Inputs** 

**Input range** 0 -12V DC Voltage or voltage-free switch

contact

**Type** User selectable: switch, event (rainfall),

counter, utility meter, quadrature, difference

**Counter / Event Inputs** 

Minimum pulse width 5 ms

Maximum frequency 100 Hz

**Range** 0 - 999,999

**System Inputs** 

Type System temperature

Battery voltage Internal moisture sensor **Outputs** 

Number of outputs 2

Type 1 x Open collector for accessory control 1 x Low power sensor supply (3.3V or 5V)

Output names User definable

Output control Via browser, alarms and/or sensor warmup
Connector Waterproof - custom mating leads available

**Alarms** 

Number of alarms 16

Type SMS, email transmission and/or Twitter
Trigger User definable input and trigger point
SMS / email text 1 per alarm, user definable
# of phone numbers 3 per alarm, user definable
# of email addresses 3 per alarm, user definable

Alarm names User definable

Logger

Capacity approximately 400,000 records

Storage memory
Time resolution
Time synchronisation

Non-volatile FLASH
1 second
Automatic by NTP

Report format CSV file

Automatic reporting Directly to user by e-mail / FTP / HTTP

**Communication Interfaces** 

Ethernet
Mobile communications

Mobile communications

Antenna

Internet connectivity

10/100 base-T with LANlink Cable Standard model - built-in LTE (4G) "M" model - LTE Cat M1 /NBIOT

Internal antenna or optional external antenna

Mobile communications LAN (with LANlink Cable)

**Optional Assesories** 

HLink Wi-Fi Interface LANlink Cable Spare Battery Packs Custom Input and Output Cables Universal Pipe Mounting Bracket

All specifications are subject to change without notice. Published 20 May 2023.







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