microSpider™

Ultra low power compact telemetry, logging and alarm system.

Halytech **microSpider** is an intelligent, complete solution for monitoring inputs, controlling outputs, alarm dialing and data logging. The **microSpider** can communicate via SMS, e-mail, internet, low cost satellite and more.

The **microSpider** is housed in a compact IP68 environmental enclosure that includes long life primary batteries. Installation costs are dramatically reduced as there is no need for external power supplies or enclosures.
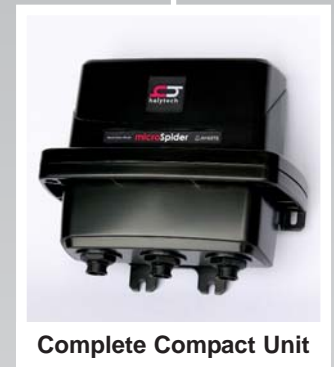
The **microSpider** has a built in web server supporting communications with most computers and operating systems without the need to install any software. This unique design offers unprecedented ease of use and full control over all operating parameters.

Complete Compact Unit
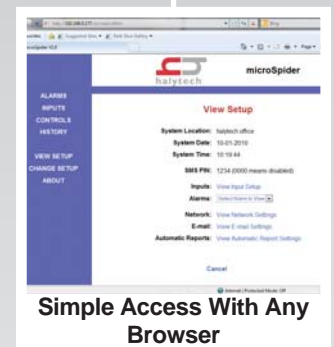
Features

- Complete system includes:
    - Compact IP 68 enclosure with built-in mounting system
    - 4 multi-type inputs (digital with tamper, analogue and more)
    - 2 digital outputs for sensor / accessory control
    - Ethernet Interface
    - Integrated GSM, NextG or Satellite modem
    - Internal or external antenna
    - Huge 400,000 record non-volatile data memory
    - Built-in high capacity lithium batteries
- User configurable inputs, outputs and alarms
- Connects to any computer with a browser and LAN port
- Easy to use internet-type setup
- Download data as a CSV file compatible with Excel
- Alarms via SMS / e-mail / Twitter
- Automatic CSV reports via e-mail / FTP
- Ultra low power design - up to 10 year battery life
- Simple and inexpensive to install - no external enclosures, batteries or solar panels
- Remotely upgradeable software
- Enerprise level management - automatically manage 1000's of microSpiders
- Optional external intelligent sensors: SDI-12, Modbus, GPS
- Designed and manufactured in Australia

Simple Access With Any Browser

Remote Deployment
Built-in GSM or NextG comms

Typical Applications

- Environmental Monitoring
- Utility Meter Monitoring
- Agriculture
- Traffic Monitoring
- Water Treatment
- Irrigation and Bore Monitoring

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Specifications

General

Dimensions (approx)	165(W) x 145(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 backup	12 months parts and labour guarantee

Power Supply

Battery	Integrated long life lithium batteries with up to 10 years battery life (depending on application) Optional second battery pack

Inputs

Total number of inputs	4 multi-type + 2 system inputs
Multi - type	Digital, analogue, counter, event, quadrature, intelligent (individually user definable)
Intelligent type	SDI-12, Modbus, GPS
Input names	User definable
Connector	Waterproof - custom mating leads available

Digital Inputs

Type	0 -12V DC Voltage or voltage-free switch contact

Analogue Inputs

Resolution	12 bits
Calibration	2 - point, 1-point or manual
Units of measure	User definable
Supported types	4 - 20 mA, common ground 0 - 1V, common ground 0 - 2.5V, common ground 0 - 5V, common ground 0 - 10V, common ground

Counter / Event Inputs

Minimum pulse width	5 ms
Maximum frequency	100 Hz
Range	0 - 999,999

System Inputs

Type	System temperature Battery voltage

Outputs

Number of outputs	3
Type	1 x open collector, 1 x high side power switch 1 x low power sensor supply (3.3V or 5V)
Connector	Waterproof - custom mating leads available
Output Names	User definable
Output Control	Via browser, alarms and/or sensor warmup

Alarms

Number of alarms	8
Type	SMS, e-mail transmission and/or Twitter
Trigger	User definable input and trigger point
SMS / e-mail text	1 per alarm, user definable
# of phone numbers	3 per alarm, user definable
# of e-mail addresses	3 per alarm, user definable
Alarm names	User definable

Logger

Capacity	approximately 400,000 records
Storage memory	Non-volatile FLASH
Time resolution	1 second
Time synchronisation	Automatic by NTP
Download format	CSV file

Communication Interfaces

Ethernet	10 base-T, RJ-45 connector on comms cable
Mobile communications	Built-in GSM, NextG or Iridium
Antenna	Standard - internal antenna Optional - external antenna
Internet connectivity	GPRS or 3G (modem type and network dependent)

Optional Assesories

Custom Input and Output Cables
microSpider Communication Cable
Spare battery packs

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