

## Compact low power telemetry, data-logging and alarm system

Halytech **microSpider industrial** is a complete, cost-effective solution for monitoring inputs, controlling outputs, alarm dialling and data logging. It can communicate via Ethernet, SMS, e-mail, internet, low cost satellite and more.

The **microSpider industrial** is a low-power device with an optional built-in battery charger regulator making it very suitable for use with remote, solar powered equipment as well as in industrial installations where battery backup is required.

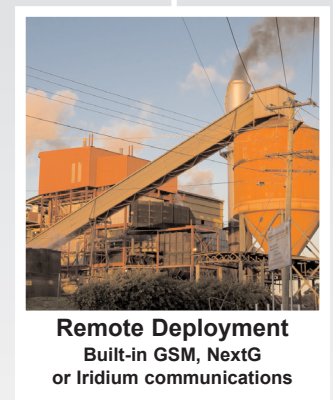
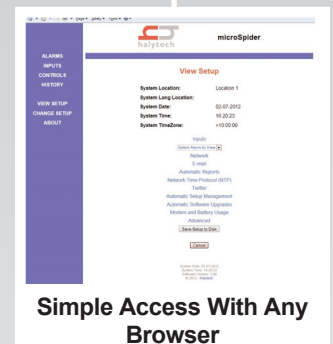
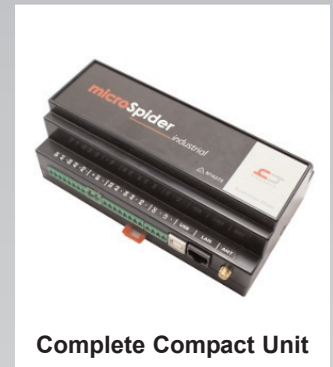
Featuring a built-in web server, the **microSpider industrial** can be configured by any computer with a web browser. No software or licence fees are required. This unique design offers unprecedented ease of use and full control over all operating parameters.

### Features

- Complete system includes:
  - DIN-rail mounted ABS enclosure
  - 4 multi-type inputs (digital with tamper, analog and more)
  - 2 digital outputs for sensor / accessory control
  - Programmable low power sensor power supply
  - 400,000 record non-volatile FLASH memory
  - Ethernet interface
  - Integrated GSM, NextG or satellite modem
  - Low profile antenna (GSM/NextG)
- User configurable inputs, outputs and alarms
- Optional integrated battery charger regulator
- Connects to any computer with a browser and LAN port
- Easy to use internet style setup
- Download data as a CSV file compatible with Excel
- Alarms via SMS, email and Twitter
- Automatic CSV reports via email and FTP
- Ultra low power design - perfect for solar powered applications
- Remotely upgradeable software
- Enterprise level management - automatically manage thousands of microSpiders
- Optional external intelligent sensor interfaces: Modbus, SDI-12, GPS
- Designed and manufactured in Australia

### Typical Applications

- Alarm dialling
- Data logging
- Remote monitoring



# Specifications

## General

Dimensions (approx)	156(W) x 87(H) x 60(D) mm
Weight (approx)	500 g
Enclosure rating	IP - 50
Enclosure material	ABS
Mounting system	DIN Rail
Operating temperature	standard -5 to +50 deg C optional -30 to + 70 degC
Factory backup	12 months parts and labour guarantee

## Power Supply

Battery or power supply requirement	12VDC, min 1A
Power consumption	Standby 95uA Active <3mA (modem off, LAN powered externally) Active 80mA (modem on, LAN powered internally) Active 250mA (modem on, communicating)

Optional integrated battery charger regulator	Charges an external 12V SLA battery from an external 12V solar panel or a 16 - 30V DC 2A power source
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## Inputs

Total number of inputs	4 multi-type + 2 system inputs
Multi-type	Digital, analog, counter, event, quadrature, intelligent (individually user definable)
Intelligent type	SDI-12, Modbus, GPS
Input names	User definable
Connector	Modular, plug-in terminal block
Wire size	Up to 1.5mm <sup>2</sup>

## Digital Inputs

Type	0 - 12V DC Voltage or voltage-free switch contact
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## 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 - 999,999.999

## System Inputs

Type	System temperature External Battery voltage Charger Voltage
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## 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	Modular, plug-in terminal block
Wire Size	Up to 1.5mm <sup>2</sup>
Output Names	User definable
Output Control	Via browser, alarms and/or sensor warmup

## Alarms

Number of alarms	8
Type	SMS, e-mail 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 (or GPS if fitted)
Download format	CSV file

## Communication Interfaces

Ethernet	10 base-T, RJ-45 connector
Mobile communications	Built-in GSM, NextG or Iridium Satellite
Antenna	External antenna, SMA connector
Internet connectivity	GPRS or 3G (modem type and network dependent) LAN

## Optional Assesories

Weatherproof enclosure	
Intelligent sensor adapter - Modbus and SDI-12, GPS	
Mains power supply	
Solar panel	
Sealed lead acid battery	
Range of external GSM / NextG Antennae	

