Spider 2 ™

Compact low power telemetry, logging and alarm system

Halytech **Spider 2** is an intelligent, integrated system capable of monitoring inputs, controlling outputs, alarm dialing, logging and reporting. The **Spider 2** can communicate by SMS text messages, e-mail, internet and more.

It offers low power consumption making it suitable for remote, stand-alone, battery powered installations. It is ideal for system integrators and OEM applications.

Every **Spider 2** has a built-in web server. It allows communication with most computers regardless of operating system, without the need to install any software. Its unique design offers unprecedented ease of use as well as complete user programmability of all operating parameters.

Spider 2 adds many new communications, security and functional features, while retaining full compatibility with the original **Spider SMS**.

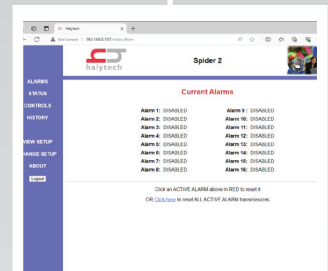
Compact Size

Features

- Compact, lightweight enclosure
- Digital and analogue input interface
- Relay outputs with 7 day / 24 hour programmable timer
- SMS and email notification of alarms
- Automatic reporting by Email (TLS), FTP(S) and HTTP(S)
- Remote control by SMS or web browser
- Email sending via LAN or LTE (4G) mobile network
- High-capacity data logger with non-volatile memory
- Integrated LTE (4G), Wi-Fi and Bluetooth communications
- Built-in solar panel / mains charger support for external battery
- Very low power consumption
- Requires no system integration or custom software
- User configurable inputs, outputs and alarms
- User friendly web interface
- Local Area Network (LAN), Wi-Fi, Bluetooth and remote modem access
- Simple installation and setup
- Remotely upgradeable

Simple Access With Any Browser

Wireless Communications
LTE (4G), Wi-Fi, Bluetooth

Typical Applications

- Environmental Monitoring
- Access Control
- Air Conditioning
- Pump Control
- Flood Alert
- Traffic Monitoring
- Water Treatment
- Irrigation
- Tank Level Monitoring
- Trade Waste Monitoring

halytech

Specifications

General

Dimensions (approx)	110 (W) x 200 (H) x 90 (D) mm
Weight (approx)	650g
Enclosure rating	IP - 50
Enclosure material	UV stable polymer
Mounting system	Integrated into enclosure
Operating temperature	-5 to +50 degrees Celsius
Factory backup	12 months warranty

Power Supply

Operating voltage	Nominal 12 V DC
Power consumption	approx. 10 mA in standard LP mode less than 1 mA in XLP mode
Charger type	Built in battery management system supporting an external battery and external 12V solar panel and/or 16 - 24V DC mains charger

Inputs

Total number of inputs	8 user inputs + 3 system inputs
User Input type	Digital, analogue, counter or event, individually definable by the user
Connector	Modular, plug-in terminal block
Wire size	Up to 1.5 mm^2
Input names	User definable

Digital Inputs

Type	Voltage-free switch contact

Analogue Inputs

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

Counter / Event Inputs

Minimum pulse width	100 ms
Range	0 - 99,999

Intelligent Inputs

Type	Modbus, Wireless

System Inputs

Type	Battery voltage,Charger status, System temperature

Outputs

Number of outputs	8
Type	Normally open relay contacts
Contact rating	1A 30V DC resistive
Connector	Modular, plug-in terminal block
Wire size	Up to 1.5 mm^2
Output Names	User definable
Output Control	Via browser and/or SMS and/or timer and/or alarms

Alarms

Number of alarms	16
Type	SMS and/or email transmission
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 email addresses	2 per alarm, user definable
Alarm names	User definable

Logger

Capacity	25,000 records
Storage memory	Non-volatile eMMC
Time resolution	1 second
Time synchronisation	Automatic by NTP
Download format	CSV file
Auxiliary storage	SD card

Automatic Reporting

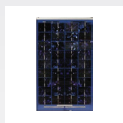|	
Supported protocols	Email (TLS), FTP(S), HTTP
Supported interfaces	Ethernet, LTE mobile telephone network
Report types	CSV in multiple user selectable formats

Local Display and Keypad

Display	16 character x 2 line alphanumeric LCD with backlight
Keypad	Integrated, single key
Capability	Show inputs, outputs, alarms, LAN parameters (no external computer required)

Communication Interfaces

Ethernet	10 / 100 base-T, RJ-45 connector
Cellular phone	Built-in 4G or LTE Cat-M1 modular modem External antenna(s)
Internet connectivity	Ethernet, LTE mobile telephone network
Wi-Fi	IEEE 802.11 b/g/n
Bluetooth	5.0 (Basic Rate, Enhanced Rate and BLE)
USB port	High-speed with microUSB connector
Auxiliary port 1	RS-232C for intelligent sensors
Auxiliary port 2	RS-485 for intelligent sensors

All specifications are subject to change without notice. Published 13 August 2024.

Optional Accessories

Solar Charger

Mains Charger

Rechargeable Battery

halytech