

Spider AMRTM

Wireless



Automatic Meter Reading System

Description

Halytech Spider AMR is an advanced data-logging and communications system for use in Automatic Meter Reading (AMR) solutions. Compatible with pulse type meters as well as smart meters, **Spider AMR** is modular, scalable, cost-effective and offers great flexibility when implementing AMR in new or existing buildings. Available in wired, wireless and mixed formats, **Spider AMR** is suitable for use in a wide range of applications such as: shopping centres, universities, golf courses, apartment buildings, high-rise commercial buildings, airports, schools, industrial sites and factories.

Spider AMR- Wireless communicates with radio transmitters fitted to gas, water and electricity meters at a distance of up to 3km and does not require expensive cabling or trenches. You can use it where you want to deploy a complete system or where you just want to start with a few meters and build it up over time. Each base station can handle up to a total of 400 gas, water and/or electricity meters.

In all **Spider AMR** systems, meter data is sent as a CSV file by email or FTP using LAN, WAN, GSM or NextG networks giving full control over your data. Many users of **Spider AMR** use MS Excel to analyse their data while others employ specialist software or web-based services for visualization and reporting. Whichever method you choose, you control the data. A major advantage of **Spider AMR** is the ability to start with a small system and expand it as required or as funds permit.

Features

Base Station

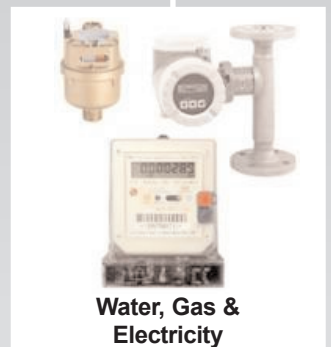
- Powder-coated steel enclosure, IP66
- Spider AMR high-capacity solid state data logger
- WRX 433MHz radio receiver
- Manages up to 100 WTX-type transmitters
- Integrated LAN, WAN, NextG or GSM communications
- Connects to SCADA or BMS using Modbus (option)
- Sends CSV data by email and/or FTP
- Sends alarms by SMS and/or email
- Simple installation and setup
- User friendly browser interface
- User configurable analog and digital inputs, relay outputs and alarms
- Relay outputs with 7 day / 24 hour programmable timer
- Designed and manufactured in Australia

Wireless Transmitters

- IP68 enclosure
- WTX- 433MHz radio
- Wavenis protocol
- Range of up to 1km, 3km with repeaters
- Lithium battery - up to 10 years life
- Onboard data logger
- Monitor up to 4 pulse meters with tamper detection



Spider AMR



Water, Gas & Electricity



Energy & Water Monitoring

Specifications

Spider AMR Base Station

General

Dimensions (approx)	400 (W) x 300 (H) x 200 (D) mm
Weight (approx)	14 kg
Enclosure rating	IP - 66
Enclosure material	Powder-coated steel
Mounting system	Brackets included
Operating temperature	-5 to +50 degrees Celsius
Factory backup	12 months warranty

Power Supply

Operating voltage	12 Vdc (240Vac plug-pack included)
Power consumption	Maximum 220mA @12Vdc less than 1 mA in XLP mode

Battery System	Built in charger and 12V SLA battery
-----------------------	--------------------------------------

Inputs

Total number of inputs	8 user inputs + 3 system inputs
User Input type	Digital, analogue, counter or event, individually definable by the user
Input names	User definable

Digital Inputs

Type	8 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, 0 - 5V, 0 - 10V (common ground)

Counter / Event Inputs

Minimum pulse width	100 ms
----------------------------	--------

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 Control	Via browser and/or SMS and/or timer and/or alarms

Alarms

Number of alarms	8
Type	SMS and/or e-mail 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 e-mail addresses	2 per alarm, user definable
Alarm names	User definable

Logger

Capacity	25,000 records
Storage memory	Battery-backed SRAM
Time resolution	1 second
Download format	CSV file

Local Display and Keypad

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

Communication Interfaces

Ethernet	10 base-T, RJ-45 connector
Cellular phone module	Built-in NextG or GSM (as required) External antenna
Data reporting	E-mail, FTP, HTTP, Modbus
E-mail sending method	User selectable: LAN, dial-up internet or GPRS (if available)
Standard telephone line	Built in support for optional external PSTN modem

Wireless Network

Receiver

Type	433MHz frequency hopping, spread spectrum radio
Protocol	Wavenis
Capacity	Up to 100 transmitters
Antenna	High Gain
Model	WRX

Transmitters

Type	433MHz frequency hopping, spread spectrum radio
Protocol	Wavenis
Enclosure Rating	IP68
Inputs	1, 2 or 4 channel, Pulse
Input Termination	Cable & screw terminal

All specifications are subject to change without notice.

Halytech
PO Box 6983
Baulkham Hills Business Centre
NSW 2153 Australia
Phone: +612 8814-5235
email: sales@halytech.com.au
www.halytech.com.au

