CATALOGUE

IoT devices connected with Wize?

September 2024





SUMMARY

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Wize'Up by allion

www.alciom.com

PRODUCT

- Open-hardware design, provided by ALCIOM to the community under Permissive CERN-OHL v2 licence
- Developped as part of a grant contrat funded by the Wize Alliance
- Compatible with the open-source Wize protocol stack available independently from GrDF
- Full schematics, bill of materials, validation Gerbers reports and available free of charge from ALCIOM web site
- Assembled & tested modules and evaluation kits available from ALCIOM, as well as hardware customization, support and antenna design services

TECHNICAL FEATURES

- >+25dBm output power, better than -125dBm sensitivity in WM2400, 10%PER
- 3,6V to 4,2V power supply, directly compatible with LiSoCl2 primary batteries
- 2,5V logic level for best in class power consumption + sleep mode (<1µA)
- Flexible external interfaces : UART + I2C + 6 generic digital or analog I/Os
- Module size 38x28mm, SMT and PTH compatible, optional shield
- STM32L451CEU6 micro-processor (Cortex M4, 512KB flash, 160KB RAM, RTC)
- Additionnal 1Mb serial EEPROM for secure FOTA upgrades
- ADF7030-1 transceiver and SKY66100 front-end, on-module TCXO
- ESD protection and filtering of the antenne port
- EN300220 precompliance report provided by **ALCIOM** for information



WHERE TO BUY IT?

To buy this module contact them at: contact@alciom.com



A remote management solution for public lighting. The RDS - LIGHT solution is a FM-based control system that optimises public lighting and allows local autorities and electrical operators to see any malfunctions in real time.

The RDS-LIGHT 4R box has been designed for installation in public lighting cabinets. It contains an intelligent local astronomical clock, as well as a measurement card that warns of several possible alerts: cabinet failure alert, disjunction alert, forced operation alert, etc.

The modules and applications enable to:

- switch on and off at the right time
- remote control
- change cut-off times in the middle of the night (ie. energy saving plan)

TECHNICAL FEATURES

- Use existing networks
- Large signal depth
- open source specifications
- open source license for hardware
- Wize protocol

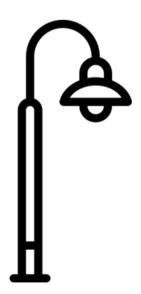
RDS-LIGHT MODULES & APPLICATION

- Lamp@Ville application: web application for controlling and supervising street lighting
- RDS-LIGHT 4R module: control and supervision module to be installed in the control cabinet
- MINI module: control module to be installed in a cabinet or small electrical box
- ZHAGALEE module: control/supervision module for installation on a Zhaga connector



www.biyotee.com

WHERE TO BUY IT? Contact: lmichel@biyotee.com



The ECHO system is designed and adapted to the specific needs of monitoring and management of Cathodic Protection. The ECHO system is a complete digital chain of remote monitoring, supervision and control, implemented in the field of Cathodic Protection. (Protection against corrosion of buried or immersed metallic structures). Communications and data exchange comply with security and confidentiality requirements.

The customer is the owner of his data which he has fully and without restriction.

TECHNICAL FEATURES

- Battery long life
- IP class: IP66
- Case size: 191 x 125 x 60mm (H, W, P)
- Antenna size: 80mm (H)
- Weight: 500g (depending on option)
- Entries / Exits: 4 analog inputs AC & DC + 2 logic inputs + 1 relay output
- Digital interfaces: CAN BUS
- Connectivity: WIZE 2G / 4G
- Galvanic isolation between the channels, 4kV, 6kV over 1 second. Protection by Transil Diode on each channel, 15kV discharge by air and 10kV discharge by contact.



www.jacquet-dechaume.fr

WHERE TO BUY IT?

Contact: Ludovic.denys@jacquetdechaume.fr



VHF CP V2 is a radio module designed for long-range fixed network remote reading of Diehl Metering water meters. VHF CP V2 can be easily clipped on all the meters of the Diehl Metering inductive modular range (Ha+Ti or Ti) with a grey or red ring. Its tamper-proof sensor operating on inductive principle enables the data collection of the water meter and the reading is ensured via a bidirectional link in longrange fixed network mode.

TECHNICAL FEATURES

- Compact radio emitter
- Compatible with Diehl Metering meters
- Available in 169 MHz with WIZE protocol
- Suitable for fixed network reading
- IP 68
- Lifetime up to 15 years
- Different functions and alarms available
- Insensitive to magnetic fraud



https://www.diehl.com

WHERE TO BUY IT?

Get in touch with: emmanuel.argouges@diehl.com water





VHF V2 Wize RT by

PRODUCT

VHF V2 Wize RT is the Diehl Metering solution for meters installed in location where a clip-on radio is not adapted (very low radio signal, flooding conditions, ...) or for upgrading any compatible pulse emitting meter. VHF V2 Wize RT is connected to pulse emitter installed on water meter. Bidirectionnal Radio communication complies with Wize protocol and ensure sa long-range communication reinforced by the possibility to place the antenna in optimal conditions. The device is field programmable with the serial number of the associated meter. VHF V2 Wize RT offers multiple functions (historical index value, remaining battery lifetime, etc) and alarms (leaks detection, meter stopped, backflow,

etc) if pulse emitter is able to generate this information.

TECHNICAL FEATURES

- Remote radio emitter
- Compatible with most pulse emitting meters
- Suitable for fixed network reading
- IP 68
- Lifetime up to 15 years
- Different functions and alarms available.
- Insensitive to magnetic fraud
- Power supply: 2 Lithium battery 3.6 V
- Radio Range: Up to 2 km depending on the environment
- Ambient operating temperature °C: -15 to +55
- Storage temperature °C: -20 to +65



https://www.diehl.com

WHERE TO BUY IT?

Get in touch with: emmanuel.argouges@diehl.co m

ON'connect switch by () hydrelis

PRODUCT

Water circuit breaker for professionals. With the switch, you gain security and flexibility in the water supply of your buildings and you can be sure to save money.

- better monitoring of consumption of your sites and buildings
- prevention of risk of leakage or of water damage (automated cut-off in case of leakage)
- real-time alerts in case of a proven leak
- management of occupancy seasonality (automatic cut-off: night, vacations, weekends...)

OPTIONS

- BMS/GTB connection: Wire modbus or wire on automation
- GPRS or remote reading management.
- Diameters available: from DN15 to **DN100**

at this address:



www.hydrelis.com

WHERE TO BUY IT?

To buy Switch Flow, get in touch magali.remy@hydrelis.com



Cyble LRF v2 Wize by

PRODUCT

The Cyble technology developed and patented by Itron eliminates the risk of metering errors and takes into account backflow.

The LRF V2 module is compatible with the entire range of hot and cold water meters equipped with the Cyble Itron pointer.

The Cyble LRF v2 Module is compact and can be mounted directly on the meter, without any wires or fixing accessories, making it very easy to install.

TECHNICAL FEATURES

- Modulation: FSK / GFSK
- Transmission: 1-channel / 2-channel 1G and 2G mode compatible
- 15 years typical, under normal use and environmental conditions.
 - 24 indexes,
 - Data transmitted 213.3 Bytes/Day
 - 2400 baud rate
 - +16 dBm Radiated power
- Humidity resistant: 0 to 98%
- Functionning temperature: -20 to + 55°C
- Storage temperature: 0 to 35°C
- Conformity: RED N° 2014/53/UE



www.itron.com

WHERE TO BUY IT?

You can buy this device here: https://www.itron.com/na/contact /sales-inquiry



GAZPAR combines a Gallus-type residential diaphragm gas meter with an integrated 169 Mhz radio module. Gazpar, combined with its remote reading system, enables the automated and remote collection of gas indexes at daily, hourly or 1/4 hourly intervals.

TECHNICAL FEATURES

- Proven membrane metrology
- Operational life of 20 years (battery powered)
- Remote software update
- Local NFC communication
- Cyclic volume: 1.2 dm3
- Measuring range: G4 Qmin : 0.04 m3/h Qmax: 6 m3/h
- Max Pressure: 0.5 bar
- Functionning temperature: -25 to + 55°C
- Storage temperature: -25 to +70°C
- Battery: Lithium/Manganese Dioxide
- 2040 g



www.itron.com

WHERE TO BUY IT?

You can buy this device here: https://www.itron.com/na/contact /sales-inquiry



RC1701HP-WIZE by

PRODUCT

Wize compliant RF module that measures only 12.7 x 25.4 x 3.7 mm. The module contains a communication controller with embedded Wize protocol (v.1.1) as specified by the Wize Alliance based on Wireless M-Bus (EN 13757-4) operating at 169 MHz with 500 mW output power. The module is compliance tested for operation under the European radio regulations.

TECHNICAL FEATURES

- No external components except antenna
- Antenna tuning feature
- High power, long range (20 km Line-Of-Sight)
- Completely shielded module for SMD mounting
- 12.7 x 25.4 x 3.7 mm compact module for SMD mounting
- 2.8 3.6 V supply voltage, ultra-low power modes
- Conforms with EU RED directive
- Configurable LBT as defined in CIG UNI/TS 11291-11-4
- Pin compatible with the RC1701HP-MBUS4 module
- Output power table in 3 dB steps from -27 dBm to +27/30 dBm as defined in CIG UNI/TS



www.https://radiocrafts.com/

WHERE TO BUY IT?

Consult their list of distributors here: https://radiocrafts.com/distributor s/



RC1701HP-WIZE-DK Development Kit by Radiocrafts www.https://radiocrafts.com/

s/

PRODUCT

The RC1701HP-WIZE Development Kit is available for rapid prototyping and proof of concept design. It includes all hardware needed to run a small Wize network from a PC. This allows you to quickly and easily test the network capabilities with minimum development resources needed. This is ideal for a first range test in a customer environment for example.

TECHNICAL FEATURES

- 2 Development Boards with RC1701HP-WIZE module
- Onboard USB level shifter and connector, SMA antenna connector, I/O breakout
- Antenna, 50-ohm quarter-wave monopole, SMA male connector
- SMA to BNC adapters
- USB cables
- C/DC battery eliminator 6VDC

WHERE TO BUY IT? Consult their list of distributors here: https://radiocrafts.com/distributor



RC1702HP Customization Module by

PRODUCT

The RC1702HP is a compact surfacemounted module that measures only 12.7 x 25.4 x 3.7 mm. The module got several optional peripherals (EEPROM, 32 kHz crystal oscillator) and interfaces and is suitable as a versatile platform for custom variants for various applications using the 169 MHz frequency band.

The module contains an ultra-narrowband radio transceiver, temperature compensated crystal oscillator, power amplifier and a communication controller with embedded software. The radio is pre-certified for operation under the European regulations (CE, RoHS, REACH).

TECHNICAL FEATURES

- Autonomous system running the full application code (No MCU required)
- Long range, high reliability
- Ultra narrowband, high-performance radio
- High sensitivity and high selectivity
- High blocking properties
- High RF Power, long range (up to 20 km Line-Of-Sight)
- Completely shielded module
- GPIO, UART, SPI and I2C interfaces
- Support for external peripherals (IRDa, NFC, RTC, EEPROM, etc)
- 2.75 3.8 V supply voltage
- Ultra low power modes
- Conforms with EU RED directive (EN 300 220, EN 301 489, EN 60950), RoHS, REACH

Radiocrafts Embedded Wireless Solutions

www.https://radiocrafts.com/

WHERE TO BUY IT?

Contact Radiocrafts at sales@radiocrafts.com for more information on the RC1702HP customization module.





G4 diaphragm gas meter by

PRODUCT

G4 meter is a volumetric measuring instrument with diaphragms wall for natural gas, manufactured gas, LPG, and technical gases, designed for residential use.

Measurement precision and accuracy is guaranteed by the production and control process, and by an automated calibration system, which is used at the internal Metrological Laboratory upon 100% of the meters produced. The quality of the plastic and metal components makes the meters highly sensitive, even with a minimal gas flow, and ensures excellent performance over time.

TECHNICAL FEATURES

- Membrane in synthetic material
- Casing in galvanized sheet steel with polyester paint
- Meter with galvanized sheet steel, provides an excellent protection against corrosion, and resistance to high temperatures "T"
- High stability of measurement
- Low noise and pressure absorption
- Mechanical anti-Backflow
- Designed for connection with a low frequency pulse emission (LF) probe
- Integrated tamper and electromagnetic interference protection
- Available with 160mm spacing distance
- Mechanically Transmission of the measurement to the index
- RAL 9002 standard

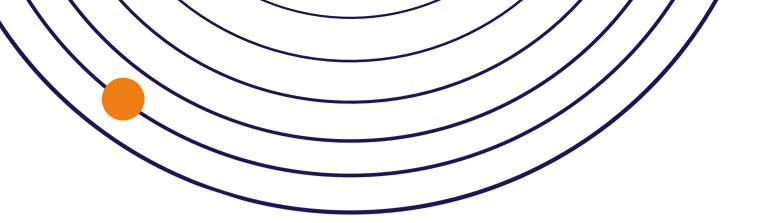


WHERE TO BUY IT?

Get in touch here: https://www.sagemcom.com/en/ contact







G6 meter is a volumetric measuring instrument with diaphragms wall for natural gas, manufactured gas, LPG, and technical gases, designed for residential use. It is designed and built according to the highest standards. Measurement precision and accuracy is guaranteed by the production and control process, and by an automated calibration system, which is used at the internal Metrological Laboratory upon 100% of the meters produced. The quality of the plastic and metal components makes the meters highly sensitive, even with a minimal gas flow, and ensures excellent performance over time.

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WHERE TO BUY IT?

Get in touch here: https://www.sagemcom.com/en/ contact



EFR32FG13 Flex Gecko Propietary Protocol SoC Family by

PRODUCT

The Flex Gecko proprietary protocol family of SoCs is part of the Wireless Gecko portfolio. Flex Gecko are ideal for enabling energyfriendly proprietary protocol networking for IoT devices.

The single-diesolution provides industry-leading energy efficiency, ultra-fast wakeup times, a scalable power amplifier, an integrated and nocompromose MCU features. Flex Gecko applications include: Home and Building Automation and Securitu, Metering, Electronic Shelf Labels, Industrial Automation, Commercial and Retail Lighting and Sensing

TECHNICAL FEATURES

- 32-bit ARM Cortex-M4 core with 40 MHz maxium operating frequency
- 512 kBv of flash and 64 kB of RAM
- Pin-compatible across EFR32FG families
- 12-channel Peripheral enabling reflex system autonomous interaction of MCU peripherals
- Autonomoud hardware crypto accelerator and true random number generator
- Integrated PA with up to 13 dBm (2.4 GHz) or 20dBm (Sub-GHz) tx power
- Integrated balun for 2.4 GHz
- Robust peripheral set and up to 32 GPIO



WHERE TO BUY IT?

Contact Silicon Labs at mitchell.klein@silabs.com

Taïga Wize: cathodic protection SIS. remote monitoring solution

PRODUCT

Stand-alone, efficient, and easy to use, TAIGA PC is an essential solution that can be easily integrated into all your sites. Final product will be released end 2022. The equipment will have two types of communication, 3 or 4G and radio modem 196MHz. This will allow to switch from expert method for drainage (statistics analysis) and classic drainage acquisition. When TAIGA PC detects a state change or a threshold crossing, it triggers a

communication within one minute.

TECHNICAL FEATURES

- 4 analog inputs: Measurement of Transformer rectifier potential or « U Rail / asa@sis-solutions.com Ground » / Measurement of the Transformer rectifier or drainage current / Pipe / Ground potential measurement / Measure on metallic corrosion coupon
- Acquisitions / Transmissions: 1 acquisition/second, Statistical processing/second, Transmissions ensured by the SEVBUS protocol
- 4 digital inputs
- 1 output: MOS type
- Power Supply: 3-year battery life * with internal lithium battery and 220v / 7v 1A transformer



WHERE TO BUY IT?

Contact SIS Smart Solutions at



WIZE Remote transmitter for Pulse sensors and acoustic loggers by

PRODUCT

The 4 wires of the cable (3 signals and a mass) of the VHF Acoustic Data Logger Transceiver can interface sensors at the pulse input or communication bus. The integrated software allows the management of 3 types of sensors:

- Pulse: Pulse transmitter mounted on water meter, for example with direction and fraud signals;
- Sewerin VonRoll: acoustic water leak prelocator;
- Seba: acoustic water leak prelocator;

The device has a local NFC interface allowing the update of the integrated software to allow evolution or reparameterization. Radio transmission is carried out through SUEZ Digital Solutions' long-range fixed network remote reading system.

TECHNICAL FEATURES

- 2 Lithium batteries
- Storage and transport temperature: -25°C to $+65^{\circ}C$
- Operating temperature: -20°C to +55°C
- Dimensions: 160 x 50 mm
- Resistances: Water and dust (IP 68), UV, freezing, magnetic corrosion, vibrations, shocks, overpressure, chemical attack
- Lifetime: Pulse: 15 years Sewerin / Seba: 10 years



https://www.suezsmartsolutions.com/

WHERE TO BUY IT?

fields,

You can buy this device by getting in touch here: https://www.suezsmartsolutions. com/en/contact



