

An open-hardware High performance Wize module

The open source Wize solution

- 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, Gerbers and validation reports 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





High performance design

- >+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 (<1 μ A)
- 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

Flexible integration

- · Wize'Up design (schematic and/or routing) can be easily cut & pasted in any custom Wize-compatible design
- Wize'Up module can be bough from ALCIOM or manufactured by anyone freely and directly used in the product
- Module can be soldered to the board (SMT) or plugged on 0.1inch headers for easy prototyping
- Application software can either run on the module or on an external application processor, using the open AT command interface developped by ALCIOM and integrated in GRDF open source Wize Stack



