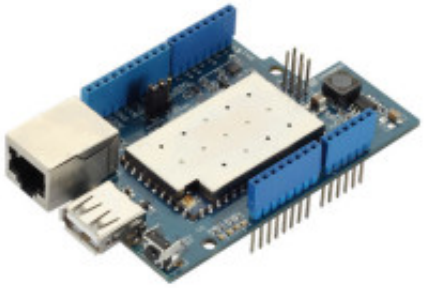
YUN SHIELD



Produktkode: 905aa
Tilgjengelighet: 1
Weight: 0.00kg
Ring etter pris: 91166668

Kort beskrivelse
YUN SHIELD

Beskrivelse
Yun Shield, designed by Dragino, is one of the most powerful shields for Arduino Board on the present market. One of the main calls for the design of Yun Shield is to make up for the insufficient Internet connectivity and the storage issue for Arduino Board

Yun Shield runs Open Source OpenWrt system (Same system as runs in Arduino Yun) and it is fully compatible with Arduino IDE v1.5.4 or later versions. Yun Shield is the ideal choice for Arduino Projects which require various internet connections and more storage.

Basically, Yun Shield + Leonardo is equal to the official Arduino Yun, but Yun Shield is more flexible because it can work with other Arduino board such as Uno, Duemilanove, Mega etc. And Yun Shield uses external wifi antenna which provides stability and possibility for various environments.

Features

- Open source Linux (OpenWrt) inside
- Low power consumption

- Compatible with Arduino IDE 1.5.4 or later, user can program, debug or upload sketch to Arduino board via Arduino IDE.
- Managed by Web GUI, SSH via LAN or WiFi
- Software upgradable via network
- Built-in web server
- Support internet connection via LAN port, WiFi or 3G dongle.
- Support USB flash to provide storage for Arduino projects.
- Failsafe design provides robustly system.
- Compatible with Arduino Leonardo, Uno , Duemilanove, Diecimila, Mega,etc.

Specifications

Processor: 400MHz, 24K MIPS

Flash: 16MBytes

RAM: 64MBytes

Power Input: 4.75v ~ 23v via Arduino VIN pin

1 x 10M/100M RJ45 connector

150M WiFi 802.11 b/g/n

External Antenna via I-Pex connector

1 x USB 2.0 host connector, used for USB storage or 3G connection

1 x Reset button

Compatible with 3.3v or 5v I/O Arduino.

POWER

The Dragino HE is the core module of Yun Shield. The HE module requires around 200ma current when in full load, so it is powered by the Arduino VIN pins to avoid overheated in the Arduino onboard 5v LDO. So when Yun shield is in used, the Arduino board should be powered by DC port instead of USB port. The DC input can be 7v -15v.

The USB Host of Yun Shield gets power from the Arduino +5vpin, since the +5v from Arduino comes from the +5V LDO, to avoid overheated on the Arduino Board, when the USB host is in used, it is recommended to use +7v DC.

Interface

The RJ45, WiFi, USB Host and Failsafe are connected to the Dragino HE module directly. And the Dragino HE module use SPI and UART to communicate with Arduino Board. Yun Shield is compatible with 3.3v and 5v Arduino board. The on board jumper SV1is used to set the SPI and UART to 3.3v or 5v level.

The SPI interface is used to upload the sketches comes from the Arduino IDE. SPI interface only connects to Dragino HE during uploading so the ArduinoSPI can still be used to connect to other SPI slave devices.

The UART interface is used for the Bridge class in Arduino, there are lots of examples explain how to use the bridge class in the Arduino IDE. It is the core of Yun solution. We must make sure the serial Interface of Arduino is not used by other hardware.

LEDs

There are four LEDs on the Yun Shield. The functions of these LEDs are:

PWR: Power Indicate LED. Turn on once there is power.

LAN: Indicate there is LAN connection when it is on or blinking.

WLAN: Indicate WiFi status.

SYS: LED for USB storage. It is on if the USB flash is linked to Arduino Yun default SD directory /mnt/sd and /www/sd

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https://www.geeetech.com/wiki/index.php/YUN_SHIELD