

# Linux, WiFi, 3G/4G IoT Gateway

# MS14N-S











### **OVERVIEW:**

The MS14N-S is a high performance Embedded Linux, WiFi appliance designed for IoT projects.

MS14N-S runs open source Linux OpenWRT system, it has one USB host port, two RJ45 connectors and support 802.11 b/g/n WiFi.

 $MS14N-S \ has internal interfaces \ with mulitiply \ GPIOs \ and \ UART \ exposed. \ Developers \ can use these interfaces to design their IoT module for various applications.$ 

#### Features:

- Open source Linux (OpenWrt) inside
- Low power consumption
- AP, Client or Mesh Ad-hoc WiFi mode
- Compatible with Arduino Yun software
- Built-in web server
- Remote upgrade AVR daughter aboard
- Managed by Web GUI, SSH or Serial
- Optional internal / external Antenna

#### **Specification:**

- Processor: 400MHz, 24K MIPS
- Flash: 16MB
- RAM: 64MB
- Power input: 9 ~ 12v DC or 5v DC
- 2 x 10M/100M RJ45 connectors
- 1 x USB 2.0 host connector
- 1 x Internal USB 2.0 host interface
- WiFi protocol: 802.11 b/g/n
- 1 x 2.4G WiFi PCB Antenna

#### **OpenWrt Inside:**

Built upon on a mature, open source linux distribution to speed up the development and debug process.

#### **Open Hardware:**

Possibility for modify / innovation and provide an unique product to the market.

#### **Modular Design:**

The most complicate and difficulty parts are built as mother board. Developers focus on the MCU daughter board design. This helps to reduce the development time, cost, risk, difficulty to release a new product to test/seize the market.

## **Applications:**

- Internet of Things projects
- Voice over IP application
- Mesh WiFi Network

#### Interface to module

- 3.3v / 5v and 12v output
- SPI /PCM/UART/I2C Interface
- GPIOs x 11
- 1 x LED for module
- RESET control from module
- Built-in web server
- 14 ports sensor connection