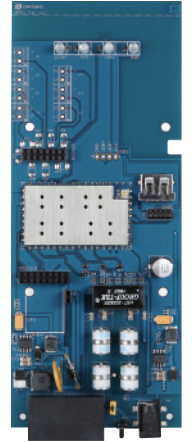


# Linux, WiFi, Outdoor IoT Appliance

## PAN



## OVERVIEW:

The PAN is an Open Source OpenWrt appliance designed for IoT application over long distance WiFi connection.

PAN has two RJ45 ports, a WiFi 802.11 b/g/n interface to provide flexible network connection via LAN cable/ wifi.

PAN is fully open source, user can modify the inside Linux system or compile a firmware for their customized applications.

The goal for PAN is to fulfill IoT requirement on dedicate application or installations where required long distance transmission. Applications for PAN include remote control of robots, data logging, web applications for data presentation, mesh networking over WiFi and many more.

## 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
- Omni antenna or Directional antenna
- Built-in micro SD card slot
- Passive PoE
- Outdoor enclosure
- Wall mountable
- Lighting protection

## Model Info:

- PAN Model N: Omni Antenna
- PAN Model D: Directional Antenna

## Specification:

- Processor: 400MHz, 24K MIPS
- Flash: 16MB
- RAM: 64MB
- Power: 12v ~ 24v Passive PoE
- 2 x 10M/100M RJ45 connectors
- 1 x USB 2.0 host connector
- WiFi protocol: 802.11 b/g/n
- 1 x Micro SD card slot

## Interface to module

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

## 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