Outdoor YOI - Low Power

IP67 Embedded Router Featuring 5W Energy Consumption for Solar or Battery Powered Wireless Internet Infrastructure.

< 5W

Use Cases

- Public Wi-Fi on autonomous power supply
- Wireless backhaul of femtocells
- Weatherproof emergency network

A set of Outdoor YOI - Low Power coupled with a stand-alone power system offers an autonomous and cable-free wireless Internet infrastructure (Wi-Fi, 3G, 4G) for cities, temporary events and large infrastructures. A network of weatherproof Outdoor YOI - Low Power can also be deployed quickly in case of emergency to restore connectivity and to support rescue operations. In each case, a network of Outdoor YOI - Low Power can inter-operate with a group of Wearable YOI or any GreenSoft enabled devices to further densify the network.

YOI (Your Own Internet device)

YOI is an embedded Linux router equipped with Green Communications' software (GreenSoft). Each router comes with 2 Wi-Fi interfaces: one to create a network with other YOI, and the other to provide access to smartphones, tablets, laptops, or any other Wi-Fi device. YOI features a web server, so one can provide local content, services, and applications to the network. You may also configure YOI as gateway to the Internet. In this case, local traffic stays local and global traffic is sent across the gateways to the Internet.

Plug & Play:
YOI routers are easy to deploy. Within minutes, a group of participants can create an instant communication network by simply turning the devices on. This sets a participatory Internet (Green PI) up, providing both local-based content and global Internet access.

Customizable:
Our devices are open. The system administrators can use SSH or serial connections to access an interactive shell on their devices, and operate them like any regular Linux system. Our products also provide network administrators and application developers with the raw network data, using standard protocols, so they can personalize the platform or build new applications and services.

Autonomous:
Some networks need to stay offline (disconnected from the Internet) for privacy reasons or because the deployment area is isolated. YOI does not require Internet access. This kind of confined Internet still offers messaging, SIP, XMPP, or sharing applications with no need for any external cloud server.

Green communications

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Ethernet	▪ 1 weatherproof Ethernet port (10/100/1000 Mbit/s)
Wi-Fi	▪ 2 Wi-Fi interfaces (a, b, g, n)
Suggested operation	▪ Wi-Fi 1: Backhaul ▪ Wi-Fi 2: Access point ▪ Ethernet: Internet when available
Frequency	▪ 2.4 GHz and 5 GHz
Antenna	▪ 4 external antennas (2 per interface, Type N, omnidirectional, 5 dBi each)
Wireless rates	▪ Up to 300 Mbit/s
Encryption	▪ WPA2/RSN (access and backhaul)
Operating system	▪ Custom Linux system (based on Buildroot)
CPU	▪ Cortex-A9 800MHz Dual Core
RAM	▪ 512 MB
Environmental features	▪ -40°C +85°C ▪ IP67
Dimensions	▪ 195 mm (L) × 150 mm (W) × 55 mm (D) (casing without antenna)
Mounting interface	▪ 4 holes of size 4.8mm (Ø) in a rectangle: 173 mm (L) x 52 mm (W)
Power supply	▪ Passive Power through Ethernet (PoE) (injector included).
Power Consumption	▪ < 5W
Weight	▪ 1,700g
Software	▪ **Each YOI comes with a GreenSoft license**

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