

YOI - 4G/LTE

Tiny Device-to-Device Router With Integrated 4G/LTE Modem For Mobile Networking.

4G_{LTE}



Use Cases:

- Green PI Network Gateway
- LTE Network Extension
- Mobile Network for Emergencies and Temporary Events

Connect your Green PI network to Internet by using the YOI – 4G/LTE as a gateway.

Green PI mobile network is an instant Internet infrastructure composed of a group of tiny YOI devices. Once, created, Green PI provides unlimited access to local content and services hosted inside YOIs (voice and video over IP, web, chat, storage, etc.). The use of a YOI-4G/LTE as a gateway will provide Green PI with an access to other networks.

YOI-4G/LTE

YOI- 4G/LTE is an embedded Linux router equipped with Green Communications' software (GreenSoft). The router comes with one Wi-Fi interface to create a network with other YOI and a 4G/LTE modem to connect the group of YOI to an external network such as private LTE and public 4G. In this case, local traffic stays local and global traffic is sent across the gateway to other networks. The YOI-4G/LTE features a web server, so one can provide local content, services, and applications to the network.

- **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:** YOI 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.

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- 4G/LTE**
 - 1 LTE/4G interface – Category 4 (LTE Bands: B1 (2100), B3 (1800), B7 (2600), B8 (900), B20 (800DD))
- Ethernet**
 - 1 Ethernet port (10/100/1000 Mbit/s)
- Wi-Fi**
 - 1 Wi-Fi interfaces (a, b, g, n)
- Suggested operation**
 - Wi-Fi 1: Backhaul
 - 4G/LTE: Other Network Gateway
 - Ethernet: Access
- Frequency**
 - 2.4 GHz and 5 GHz
- Antenna**
 - 4 external antennas (2 per interface, RP-SMA, omnidirectional, 5 dBi each)
- Wireless rates**
 - Up to 300 Mbit/s
- Encryption**
 - RSN (access (WPA3) and backhaul (WPA2))
- Operating system**
 - Custom Linux system (based on Buildroot)
- CPU**
 - Cortex-A9 800 MHz Dual Core
- RAM**
 - 512 MB
- Other Interfaces**
 - 1 USB OTG, 1 Micro-HDMI
- Environmental features**
 - -40°C +85°C
- Dimensions**
 - Approx. 85 × 105 × 35 mm (casing without antenna)
- Power supply**
 - Power through Ethernet (passive PoE) or Barrel Jack DC from 8 to 60 V (AC adapter included)
- Power Consumption**
 - < 5W
- Weight**
 - 324g (enclosure and antennas included)
- Software**
 - Each YOI comes with a GreenSoft license