

## Products

### – Gateway

SEG-X3

ZigBee Home Automation Gateway



## Description

The SEG-X3 gateway acts as a central platform of your entire smart home system. It is equipped with ZigBee and Wi-Fi communication that connects all smart devices in one central place, allowing you to control all the devices remotely through the mobile app.

## Main Features

- ZigBee 3.0
- ZigBee SEP1.1 compliant (option)
- ZigBee coordinator of the home area network
- Powerful CPU for complicated calculation
- Real time and efficiently interoperability with cloud server

## API for Third-party Integration

OWON offers open Server API (Application Programming Interface) and Gateway API to facilitate the flexible integration between the Energy Gateway and the third party Cloud Server. The users can integrate the Gateway with a designated Cloud Server / Mobile App following the Gateway API.

Main Specifications

Physical Specifications	
CPU	<ul style="list-style-type: none"><li>• ARM Cortex-M3</li></ul>
Flash Rom	<ul style="list-style-type: none"><li>• 1M</li></ul>
Data Interface	<ul style="list-style-type: none"><li>• Micro USB port</li></ul>
Data Storage Capacity	<ul style="list-style-type: none"><li>• TF Card: 8G</li></ul>
Wireless Connectivity	<ul style="list-style-type: none"><li>• ZigBee 2.4GHz IEEE 802.15.4</li><li>• Wi-Fi</li></ul>
RF Characteristics	<ul style="list-style-type: none"><li>• Operating frequency: 2.4GHz</li><li>• Internal PCB Antenna</li><li>• Range outdoor/indoor: 100m/30m (open area)</li></ul>
Power Supply	<ul style="list-style-type: none"><li>• AC 100 ~ 240V, 50~60Hz</li><li>• Rated power consumption: 1W</li></ul>
LEDs	<ul style="list-style-type: none"><li>• Power, ZigBee</li></ul>
Dimensions	<ul style="list-style-type: none"><li>• 56(W) x 66 (L) x 36(H) mm</li></ul>
Weight	<ul style="list-style-type: none"><li>• 103 g</li></ul>
Mounting Type	<ul style="list-style-type: none"><li>• Direct Plug-in</li><li>• Plug Type: US, EU, UK, AU</li></ul>

Software	
WAN Protocols	<ul style="list-style-type: none"> <li>• IP Addressing: DHCP, Static IP</li> <li>• Data Porting: TCP/IP, TCP, UDP</li> <li>• Security Modes: WEP, WPA / WPA2</li> </ul>
ZigBee Profile	<ul style="list-style-type: none"> <li>• Home Automation Profile</li> <li>• Smart Energy Profile (optional)</li> </ul>
Downlink Commands	<ul style="list-style-type: none"> <li>• Data format: JSON</li> <li>• Gateway Operation Command</li> <li>• HAN Control Command</li> </ul>
Uplink Messages	<ul style="list-style-type: none"> <li>• Data format: JSON</li> <li>• Home Area Network information</li> <li>• Smart meter data</li> </ul>
Security	Authentication <ul style="list-style-type: none"> <li>• Password protection on mobile apps</li> <li>• Server / gateway interface authentication</li> </ul> ZigBee Security <ul style="list-style-type: none"> <li>• Preconfigured Link Key</li> <li>• Certicom Implicit Certificate Authentication</li> <li>• Certificate-Based Key Exchange (CBKE)</li> <li>• Elliptic Curve Cryptography (ECC)</li> </ul>