

# Security Overview

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## Hardware

### InteliGateway (IG-302)

- FCC and UL certified.
- 10/100 Mbps Ethernet.
- ZigBee PRO Coordinator (Plover)
- uC/OS RTOS

### InteliSocket (IS-201, IS-204, IS-301, IS-302)

- FCC and UL certified
- ZigBee PRO Coordinator (Plover)

## Plover

Plover is an Ibis Networks proprietary protocol built on top of the ZigBee PRO profile. It allows communication between InteliSockets and an InteliGateway over a wireless mesh network. Plover is AES 128-bit encrypted and the encryption keys are configured directly on to the hardware. Keys are never distributed over the air. Plover can coexist with other 802.11 wireless networks, such as Wi-Fi and Bluetooth, without interference.

## IP Network

The InteliGateway communicates on two networks: via Plover to connect with the InteliSockets, or via HTTPS to connect with the InteliNetwork Cloud Service. In order for the InteliGateway to communicate via HTTPS, it needs to be plugged in via Ethernet to an IP network with access to the Internet. It always initiates an outbound connection and never listens for an inbound connection, so it does not require an open inbound port on the firewall. The InteliGateway supports both DHCP and static IP configurations.

## InteliNetwork

The HTTPS connection to the InteliNetwork uses SHA-256 RSA, TLS 1.2, and a key size of 2048 bits. Each InteliGateway that communicates with the InteliNetwork is configured with an access key that can be revoked at any time by an admin user. All sensitive information is encrypted before being stored on the database. The InteliNetwork is hosted on Amazon Web Services that is accredited under the following security standards: ISO 27001, SOC 1 and SOC 2/SSAE 16/ISAE 3402 (Previously SAS 70 Type II), PCI Level 1, FISMA Moderate and Sarbanes-Oxley (SOX).

## BACnet/IP (optional)

The IntelliGateway configuration allows enabling of BACnet/IP to integrate with a Building Management System if necessary. If BACnet/IP is required, the IP network should be tightly controlled and secured. Otherwise, BACnet/IP should be disabled.

