Zigbee is a highly flexible, extensible, and secure protocol that provides a variety of security methods and tools to serve many applications beyond traditional home automation. It gives both manufacturers and users the flexibility and control required for their specific application or ecosystem.

Zigbee Security Fundamentals

**Modern**
Zigbee is continuing to evolve and adapt to current market security requirements and standards. Zigbee PRO 2023 introduced features like Dynamic Link Key that is based on Public/Private key pair and state-of-the-art security curves.

**Robust**
Proven, self-healing mesh network eliminates single points of failure with minimal power consumption. Optimize the level of security for the specific application where the device will be used.

**Seamless**
Standardized implementation with defined best practices simplifies the user experience.

**Reliable**
Revocable security access that ensures only the devices that are currently allowed can get access to the network. Secure by design with a variety of security mechanisms including synchronous encryption.

**Proven**
Zigbee is the technology of choice for major IoT brands on the market, tested by decades of real-world deployments and use.

**Privacy**
Zigbee devices are not connected directly to the Internet, keeping all data on the Zigbee network secure and private.
Zigbee is the full stack solution from the mesh protocol to the application layer with billions of Zigbee products already deployed in smart homes and commercial buildings today. Zigbee is backward compatible and delivers the confidence that products and services will work together through standardization and testing of all layers of the stack.

Universally Adopted
Extensive library of applications and devices for residential, commercial, industrial and energy markets deployed by hundreds of companies around the world.

Established and Reliable
Over 2 decades of market adoption and real-world implementations with Billions of chipsets sold world-wide, supported by self-healing mesh that eliminates single points of failure.

Low-Power and Green
Optimized for low-power consumption to extend battery life or utilize energy-harvesting with low-memory utilization and small footprint.

Secure
Secure by design with a variety of state-of-the-art security mechanisms. Zigbee works with networks connected to the cloud while isolating applications where data should remain local.

Interoperable
Large ecosystem of products to choose from that work seamlessly together.

Full-Stack Solution
Single technology that delivers improved usability allows companies to choose what level of the stack to build their product.

Learn more at www.csa-iot.org/all-solutions/zigbee and start building with Zigbee today!