what is Bluetooth?

Bluetooth Low Energy

Bluetooth low energy (LE) is the power- version of Bluetooth that was built for the Internet of Things (IoT).

The power-efficiency of *Bluetooth*® with low energy functionality makes it perfect for devices that run for long periods on power sources, such as coin cell batteries or energy-harvesting devices. Native support for Bluetooth technology on every major operating system enables development for a broad range of connected devices, from home appliances and security systems to fitness monitors and proximity sensors

What it means for consumers

Bluetooth with its low energy functionality powers the Internet of *Your* Things. You wake up and go for a run with a heart rate monitor that communicates with your smart watch, then listen to music through your shower head. You unlock your doors, set the temperature, turn on the lights and control your TV using the smartphone or tablet you already own. All these wirelessly connected devices make your life richer through the convenience, empowerment and freedom of Bluetooth technology.

Developing with low energy and Bluetooth

Bluetooth makes it easy for developers and OEMs to create innovative new products that communicate with the billions of Bluetooth enabled devices already in the market. Bluetooth with low energy is inexpensive and developer-friendly, with a flexible development architecture that means you're only limited by your imagination. And as a Bluetooth SIG member, you can tap into a network of tens of thousands of application developers, device makers and service providers.

Key features of Bluetooth with low energy include:

- Industry-standard wireless protocol that allows for interoperability across platforms
- Ultra-low peak, average and idle mode power consumption
- Standardized application development architecture eases development and deployment time and cost
- Allows for some of the government-grade security with 128-bit AES data encryption

Learn more about the security in Bluetooth with its low energy features.

Market advantages

Reach a wider audience by leveraging a proven and ubiquitous ecosystem of billions of Bluetooth enabled devices in a growing market

- Generate new profit opportunities by quickly developing innovative wireless devices to meet changing consumer demand
- Increase revenue and customer loyalty with innovative applications and devices

The Bluetooth Core Specification also includes all previous versions, including Basic Rate/Enhanced Data Rate (BR/EDR), and Version 3.0 or Bluetooth high

speed technology.