

How to Connect

WiFi – Good for: Stationary, plugged-in devices/appliances at home or in the office that do require a higher bandwidth connection or constant connection to the Internet at large and don't need a gateway; standalone automation applications where there is existing infrastructure.

Drawbacks: Getting things set up; requires more power

Cost: Moderate

Example: Refrigerator, thermostat, sprinkler

Cellular radio – Good for: Remote applications where there's no WiFi or cellphone access; larger battery-powered applications.

Drawbacks: High power requirements; needs an ongoing service contract

Cost: High

Example: Radio dog collar, asset tracking

Bluetooth – Good for: Things that want to connect automatically to a mobile phone; proximity detection for person tracking; medical applications; low power battery-powered applications.

Drawbacks: Limited range; lack of mesh connectivity; needs a gateway to the Internet

Cost: Very low

Example: Insulin pump, fitness tracking device

ZigBee – Good for: Home automation; industrial applications; machine to machine applications; sensor networks; wide mesh area coverage; low power battery-powered applications

Drawbacks: Requires gateways; communication protocols are fragmented

Cost: Low

Example: Water valves, temperature sensors