Milesight D2D featuring LoRaWAN®

Fast Response in ONE Second

Better Inside, More in Sight

Better Inside, More in Sight

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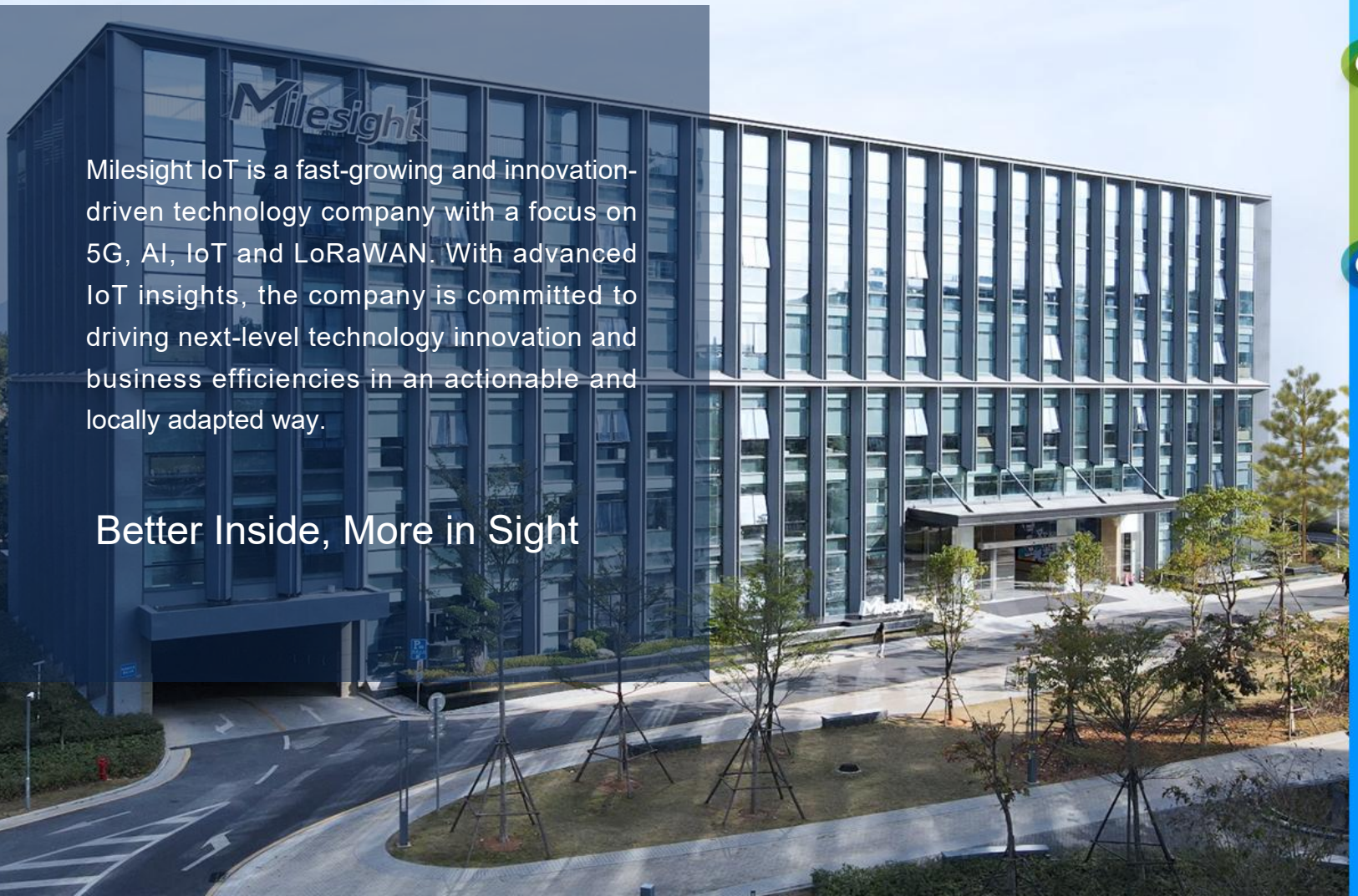
Who We Are

Company Overviw

Partners Overview

Company Overview



Milesight IoT is a fast-growing and innovation-driven technology company with a focus on 5G, AI, IoT and LoRaWAN. With advanced IoT insights, the company is committed to driving next-level technology innovation and business efficiencies in an actionable and locally adapted way.

Better Inside, More in Sight

Milesight 700+ employees

2011

Milesight Technology

Video Surveillance

2013

Yeastar

Business Communications

2017

Milesight IoT

Internet of Things

4G, 5G, LoRaWAN, AI

200+ employees

56% of employees are from R&D team

15% revenue in R&D

20K device units per month

Defect rate≤ 0.7%

Over 100 countries

200% CAGR during 2019 to 2021

We Are Trusted by Global Partners

Milesight

Sales Reach

- 120+ countries and regions in the world

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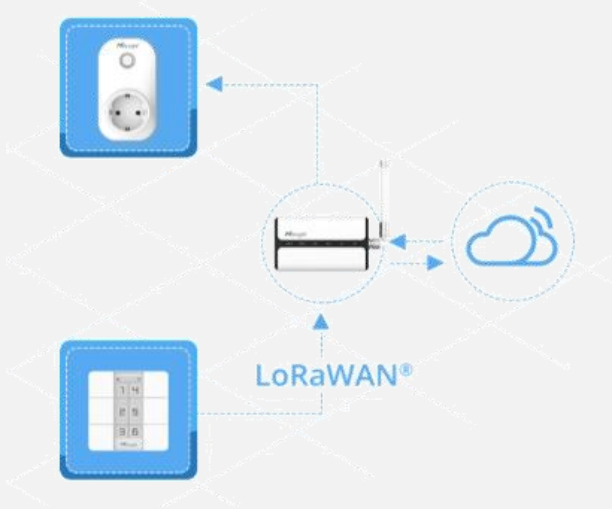
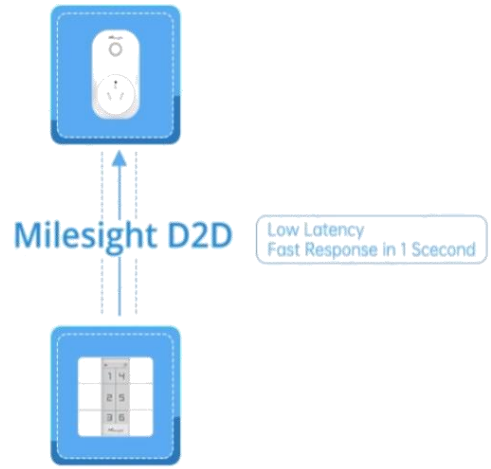
- Why Milesight D2D?

Structure of a typical LoRaWAN network



- A LoRaWAN network assumes a star topology;
- LoRaWAN characteristic is the central role of the gateways;
- Star-of-stars topology is less complex and cost efficient;

Structure of Milesight D2D



- Milesight D2D featuring LoRaWAN technolog is a device to device communications link which does not use the LoRaWAN network infrastructure, but enables LoRa based devices to communicate directly with one another when they are in the same group.

Why Milesight D2D

· Wireless · Fast · User Friendly

How does Milesight D2D benefit?

- Low latency (less than 1 second in the same room)
- Low power for battery operation of both sides
- Long range and better user experience
- As secure as the standard LoRaWAN® network
- No added hardware, only firmware upgrade operations
- No useless beaconing & difficult sync

Limitations of LoRaWAN®

- Not for real-time & lower latency applications
- Higher power consumption for multiple nodes linkage
- Not support nodes to nodes communication
- Each end device must join the LoRaWAN® network for secuirty concerns

Applications

Building

Hospital

School

Apartment

Shopping Mall

Office

Compare to Discover

	Class A	Class B	Class C	Milesight D2D
Real-time	Bad	Better	Good	Very good
Power Consumption	Low	Medium	High	Low
Peer 2 Peer	Not support	Not support	Not support	Support
Deployment	Easy	GPS-supported outdoor gateway	Easy	Easy
Security Key	Standard	Standard	Standard	Customizable

*Remark： Milesight D2D Protocol only works in Milesight brand end nodes.

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How Do Products Work?

Products Overview

Examples of Usage

Milesight D2D Devices

Controller Device

WS101
Smart Button

WS202
PIR & Light Sensor

WS301
Magnetic Contact Switch

WS156 & WS136
Smart Scene Panel

VS121
AI Workplace Occupancy Sensor

Controller or Agent Device

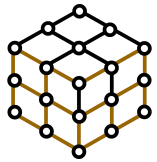
WS50x
LoRaWAN Wall Switch

UC100
IoT Controller

UC300
IoT Controller

Agent Device

WS558
Smart Light Controller

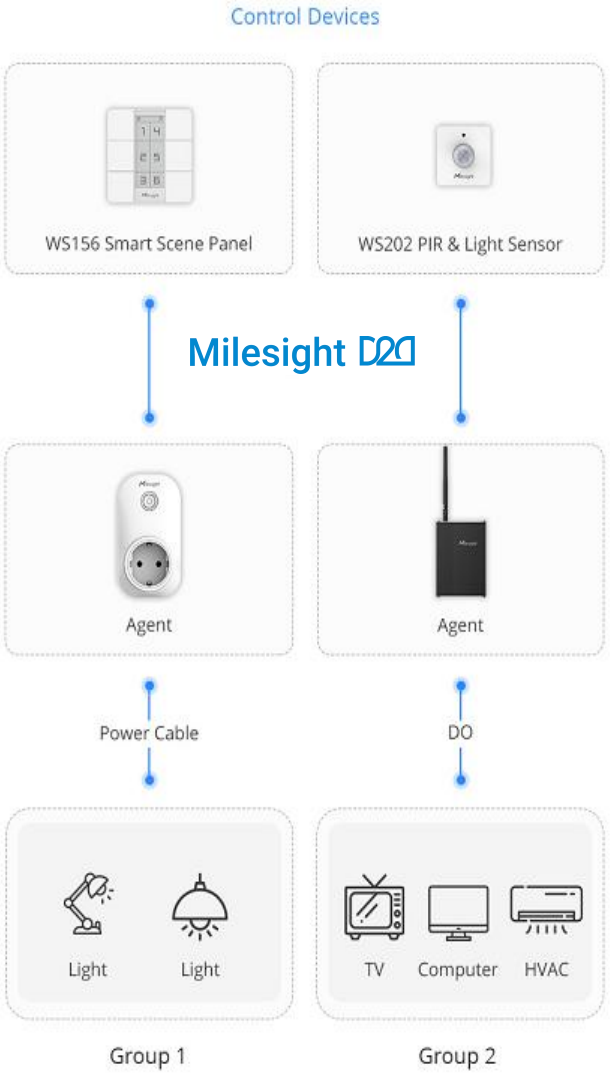


And More Under
Development

Milesight D2D

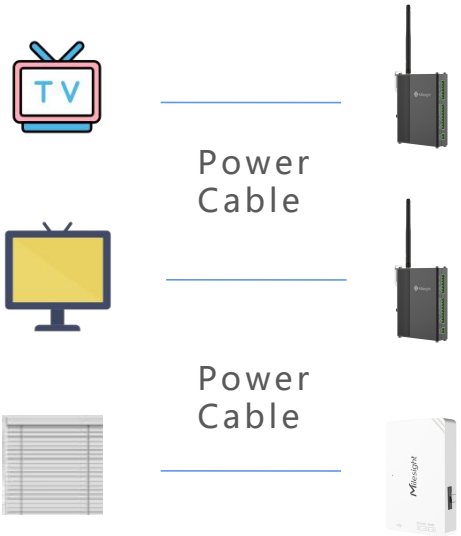
· Wireless · Fast · User Friendly

Topology

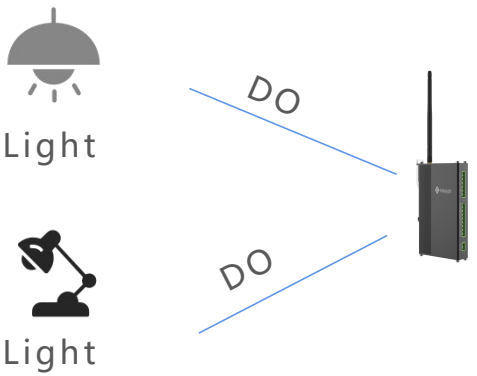


How to set them up?

GROUP 1 Agents



GROUP 2 Agents



Milesight D2D

Button 1

PIR Motion

Button 2

Illumination

Controllers

WS156
Smart Scene Panel

WS202
PIR&Light

Settings on ToolBox

- **Trigger Conditions in Controllers**

  WS156: Button 1 for Holiday;
  Button 2 for Business Day;
  WS202: PIR Motion Detection or Illumination Detection

- **Output Signal in Agents**

  WS52x: Control electric equipments
  UC300: Control various lights

- **Encryption Keys Assignment**

  Agent Group1+ Button 1+ WS202: Key 123456
  Agent Group2+ Button 2+ WS202: Key 456789

Commands

1. Press button 1 of the panel to power on/ off all the connected units in Group 1

2. Press button 2 on the panel to turn on / off all the lights in Group 2

3. Motion Detectionn by WS202 triggers the equipments in Group1 to power on/ off

4. Illumination lux level triggers the lights in Group2 to turn on or off

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Milesight D2D FAQ

Milesight D2D FAQ

Q1: Do the Milesight D2D compliant end nodes support standard LoRaWAN® protocol?

A1: Yes. They all support LoRaWAN® by default. When the D2D is enabled, device will stop the data transmission in the standard LoRaWAN® network, and prior the Milesight D2D protocol.

Q2: Can I work some of them in D2D and the rest in LoRaWAN® in WS156?

A2: Yes. Each button works individually.

Q3: Can I control the lights on the 8th floor through the panel on the ground floor?

A3: For the goodness of user experience, it’ s better to make the D2D communication among the end nodes located on the same floor, i.e. line of sight area.

Milesight D2D FAQ

Q4: Is it a ONE-TO-Many relationship between Controllers and Agents in Milesight D2D network?

A4: A controller device can control multiple agent devices, vice versa an agent device can be triggered by multiple controllers.

Q5: It seems delayed in response after clicking the button hundreds of times continuously.

A5: In smart scene panel WS136/WS156, for the sake of battery life, the initial 6 times of operation will get an immediately treatment. After that, the command will be sent with a latency of 4 seconds.

Q6: Can I convert the Controller to Agent freely according to the needs of project?

A6: Only these four end nodes can be worked as either Controller or Agent in Milesight D2D, including the UC100 and UC300 IoT Controllers, WS52x Smart Portable Socket and WS50x Wall Switch.

Milesight - Next-generation AIoT Solution Provider

AIoT Solution Provider

FUTURE

Join us and let's grow for success together!

www.milesight-iot.com