

The Milesight logo features the word "Milesight" in a blue, italicized sans-serif font. The letter "M" is a darker shade of blue and has a stylized, angular design. The background of the slide includes a large, abstract graphic on the right side consisting of multiple overlapping, parallel lines that form a large, stylized "V" or "W" shape. The lines are light gray, except for the central part which is a solid, vibrant blue. A vertical blue bar is also visible on the far left edge of the slide.

Milesight D2D Featuring LoRa

Fast Response in ONE Second

 Make Sensing Matter

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 LoRa technology 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

◆ Applications



Building



Hospital



School



Apartment



Shopping Mall



Office

◆ 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 security concerns

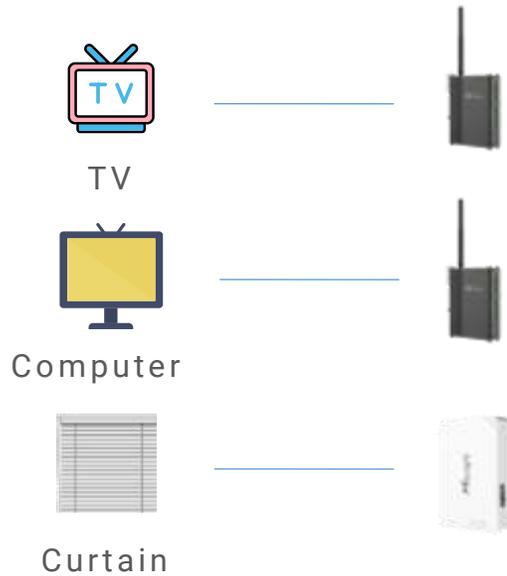
Compare to Discover

	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

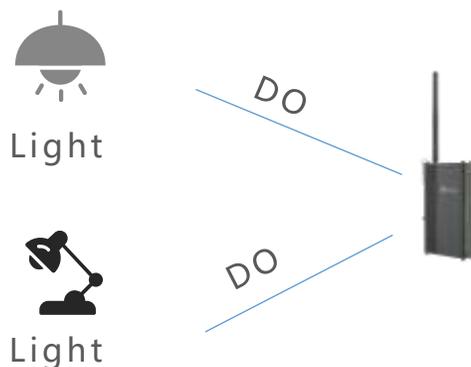
*Remark: Milesight D2D Protocol only works in Milesight brand end nodes.

How to set them up?

GROUP 1 Agents



GROUP 2 Agents



Controllers



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 Detection 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

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.

