



# CoWork Kit



## iBox CoWork Kit-B Datasheet

Unboxing Your Next Level IoT Adventure

# KIT AND TECHNOLOGY OVERVIEW

## Why CoWork Kit

Congratulations on beginning the journey of Smart Office towards a greener future.

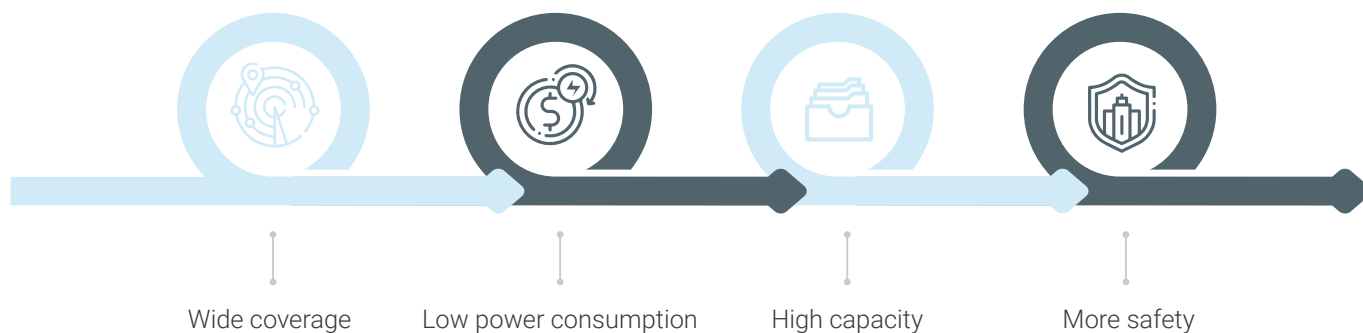
The Milesight iBox CoWork Kit transforms your workplace into a highly efficient and intelligent environment. From space occupancy and utility to office and power consumption management, two different iBox Kit can meet your various needs, taking your workplace intelligence to new heights.

" Together with IoT solutions, it's easy to obtain operational efficiency, energy saving and workplace optimization." The Milesight Team



## Why LoRaWAN®

LoRaWAN® is a long range, wide area, and low-power networking protocol.



## Why Milesight D2D



Milesight D2D is a device to device communications protocol which enables LoRaWAN® based devices to communicate directly with one another when they are in the same group.

\* Independently Developed by Milesight

- Low latency (less than 1 second in the same room)
- Low power for battery operation of both sides
- Long range and as secure as LoRaWAN®
- No useless beaconing and difficult synchronization
- Initial feature which coexists with LoRaWAN®
- No additional hardware and LoRaWAN® gateways are needed

# Smart Button

WS101 allows users to remotely control appliances, triggering a scene or calling for help.



## Overall Features

- Single/Double/Long Press Mode for Customized Application
- LoRaWAN® Wireless Deployment with Low Power Consumption
- Built-in LED Indicator & Buzzer for Status Indication
- Milesight D2D with Communication Latency to <1 Sec
- Convenient Size with 5 Years Battery Life



# WS101

Model		WS101
Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Physical Characteristics	Power Supply*	Easily Replaceable Battery with over 5-year Battery Life
	Ingress Protection	IP30
	Dimensions	50 × 50 × 18 mm (1.97 × 1.97 × 0.71 in) Button: Φ20 mm (Φ0.79 in)
	Installation	On the Flat Surfaces with Screws or 3M Tapes, Lanyard
Others	Configuration	NFC
	Button	1 × External Button + 1 × Reset Button (Internal)
	Advanced Feature	Milesight D2D Controller

\* Tested under laboratory conditions and for guideline purposes only.

# Magnetic Contact Switch

WS301 detects the opening or closing event, sending alarms accordingly. The minimal magnet is placed inside the portable part, while the sensor is inside the fixed part on door, window or other projects.



## Overall Features

- 100% Wire-Free with Double Sided Tape/Screw
- Real-Time Tamper Detection & Report
- Built-in LED Indicator for Status Indication
- Milesight D2D with Communication Latency to <1 Sec
- Convenient Size with 5 Years Battery Life



## WS301

Model		WS301
Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
	Mode	OTAA/ABP Class A
Measurement	Detection Distance	10-15 mm
Physical Characteristics	Power Supply*	Easily Replaceable Battery with over 5-year Battery Life
	Ingress Protection	IP20
	Dimension	Sensor: 50.5 × 31 × 18.5 mm (1.99 × 1.22 × 0.73 in) Magnet: 30 × 13.5 × 10 mm (1.18 × 0.53 × 0.39 in)
	Installation	On the Flat Surfaces with Screws or 3M Tapes
Others	Configuration	NFC
	Button	1 × Reset Button (Internal), 1 × Tampering Button
	Alarms	Open/Close Status, Tamper
	Advanced Feature	Milesight D2D Controller

\* Tested under laboratory conditions and for guideline purposes only.



# AI Workplace Occupancy Sensor

VS121 delivers curated insights by real-time occupancy data to unleash potential, especially for workplace and buildings.



## Overall Features

- Embedded AI Algorithm Realizes Up to 98% Accuracy Counting
- Compliant with GDPR & 100% Anonymous Detection
- 78m<sup>2</sup> Large Detection Area with 16 Custom Detection Regions
- Bi-Directional People Counting via In/Out Counting
- Smart U-Turn Detection via the U-Shape Tracks of People Flow
- Milesight D2D with Communication Latency to <1 Sec



## VS121

Model		VS121
Wireless Transmission	Technology	LoRaWAN® , Milesight D2D
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class C
Measurement	Field of View	Standard Version: 190° Horizontal, 112° Vertical
	Recognition Range	Standard Version: a Radius of 5 Meters, At the Height of 3m
	Recognition Rate	Region Counting: Up to 95% Line Crossing Counting: Up to 98% People Flow Analysis: Up to 98%
	Installation Height	Standard Version: 2.5m to 4m
	Advanced Feature	Mapped Detection Region Customization, Filter U-Turns, Privacy Mask, Dwell Time Detection
Physical Characteristics	Configuration	Wi-Fi
	Power Supply	5 VDC / 1.5A by Type-C Port
	Installation	Ceiling Mounting

\* Tested under laboratory conditions and for guideline purposes only

# Smart Scene Panel

WS156 offers occupant with predefine 6 scenes with different surrounding appliances which can be fast changed by pressing the button.



## Overall Features

- 100% Wire-Free with Multiple Scenes Control
- Customizable Display/Stickers Suitable for Various Scenarios
- Control Multiple Devices Simultaneously with One Command
- LoRaWAN® Wireless Deployment with Low Power Consumption
- Milesight D2D with Communication Latency to <1 Sec



## WS156

Model		WS156
Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
	Frequency	CN470/RU864/IN865/EU868/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class A
Physical Characteristics	Power Supply*	Easily Replaceable Batteries with over 3-Year Battery Life
	Ingress Protection	IP30
	Dimensions	86 × 86 × 14 mm (3.39 × 3.39 × 0.55 in)
	Display	2.9-Inch Black & White E-Ink Screen (WS156 Only)
	Installation	Desktop, 3M Tape Mounting, 86 Box Mounting
Others	Configuration	NFC
	Button	6 Scene Buttons (Blue Light) & 1 Reset Button (Internal)
	Advanced Feature	Milesight D2D Controller, Screen Display Customization

\* Tested under laboratory conditions and for guideline purposes only.

# Modbus to LoRaWAN® IoT Controller

UC100 is used for remote control and data acquisition from Modbus RS485 devices via LoRaWAN® networks.



## Overall Features

- Modbus RS485 to LoRaWAN® Transmission
- Data Collection up to 16 Registers for Various Usage
- Compact Size with Embedded LoRa® Antenna
- Support Autonomous Operation even when the Network is Unavailable
- Built-in LED Indicator for Status Indication
- USB Type-C Port for Local Configuration & LoRa® Downlink for Remote Configuration
- Milesight D2D with Communication Latency to <1 Sec



## UC100

Model		UC100
Wireless Transmission	Technology	LoRaWAN®, Milesight D2D
	Frequency	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4
	Mode	OTAA/ABP Class C
	Advanced Feature	Milesight D2D Controller/Agent
Data Interfaces	Connector	3.5 mm Terminal Block Connector
	Port	1 × RS485
	Protocol	Modbus RTU, Support Reading 16 Register Values
Physical Characteristics	Configuration	USB Type-C Port
	Power Supply	① 5 ~ 24 VDC by Terminal Block ② 5 VDC by Type-C Port
	Power Consumption	< 0.5 W
	Ingress Protection	IP30
	Dimension	70 × 45 × 13 mm (2.75 × 1.77 × 0.51 in)
	Installation	Desktop, Wall Mounting

# Industrial LoRaWAN® Gateway

UG56 is a high-performance 8-channel LoRaWAN® gateway that offers reliable connectivity for industrial applications.



## Overall Features

- Industrial-Grade Design with Compact Size
- Stay Connected via Ethernet, Cellular, and Wi-Fi
- Gateway Fleet for Comprehensive Networking
- Listen Before Talk (LBT) for Downlink Data Integrity
- Semtech SX1302 Chip with High-Performance Quad-Core CPU
- Embedded Network Server Compatible with TTN, ChirpStack, Everynet, Senet, etc.
- BACnet/IP Support for Seamless Integration into Existing Building Management Systems (BMS)



## UG56

Model		UG56
LoRaWAN®	Chipset	SX1302, 8 Channels (Half-duplex)
	Antenna	1 x 50 Ω SMA Connector (Center PIN: SMA Female)
	Frequency	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4
	Protocol	V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C
Connectivity	Ethernet	1 x RJ45 PoE PD Port, 10/100 Base-T (IEEE 802.3)
	Wi-Fi	IEEE 802.11b/g/n, 2.4 GHz
	Cellular (Opt.)	1 x Mini SIM-2FF Slot, Support Global GSM/3G/4G LTE Frequency Bands
Hardware	CPU	Quad-core 1.3 GHz, 64-bit ARM Cortex-A35
	Power Supply	① 1 x 802.3af Standard PoE Input ② 5V, 2A by Type-C Port
Physical Characteristics	Ingress Protection	IP30
	Dimension	110 x 75 x 24 mm (4.33 x 2.95 x 0.94 in)
	Installation	Desktop, Wall Mounting



# Milesight IoT Cloud

Milesight IoT Cloud provides unparalleled levels of vertical integration with Milesight LoRaWAN® devices.

AWS

Built on AWS to Provide Confidential and Reliable Infrastructure



Licensing with Ease: Just Copy & Paste and Upgrade Is Done



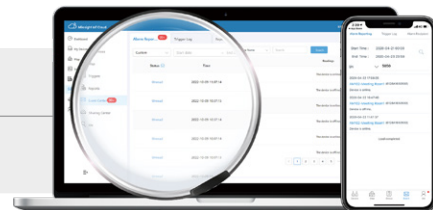
Get the **Free Trial** now and begin your data-driven future.

Transform Real-Time and Historical Data into Drag-and-Drop Widgets on Dashboard



Control Access and Monitor Projects from Anywhere

Email and Mobile Push Notifications based on Triggered Events





# Milesight Development Platform

Milesight Development Platform is an integration platform that simplifies integration and device deployment and management. With the technical complexity managed, you can fully focus on developing your IoT project.



- Easy integration & data exchange
- Centralized management of devices, applications, and projects
- Not requiring extensive software/hardware knowledge



[Try the Platform Now!](#)

If you need any assistance or clarification, please send an email to [evie@milesight.com](mailto:evie@milesight.com).



## Plan and Pricing

Free Plan - For light users	Professional Plan - For regular business users	Private Cloud
<ul style="list-style-type: none"><li>• 10 connected devices</li><li>• 3 applications for integration</li></ul>	<ul style="list-style-type: none"><li>• Connected devices: \$1/device/year</li><li>• Unlimited applications for integration</li></ul>	<ul style="list-style-type: none"><li>• Contact us</li></ul>

\*Camera product users are charged upon the number of image transmissions.

For pricing details, visit [Milesight Development Platform](#)

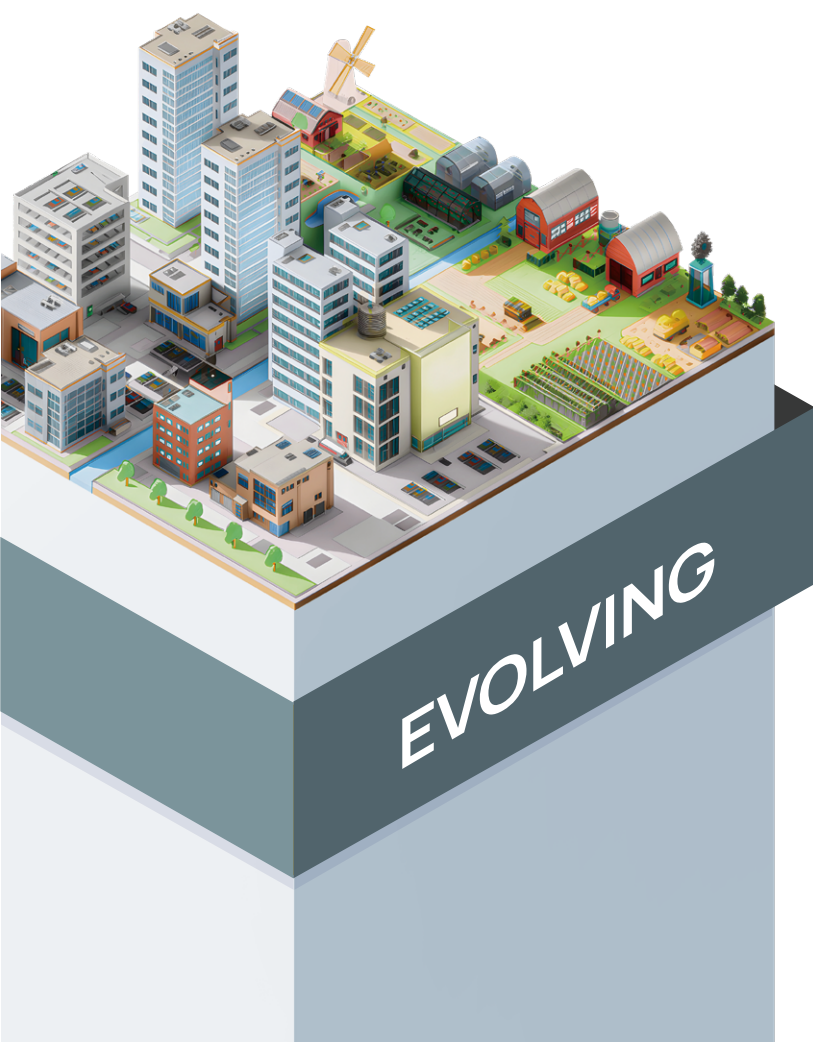


## You Can Always Trust Us

Milesight is a multi-dimensional sensing products company transforming how the world is perceived and connected, and delivering safety, efficiency, and business insights.

Our mission is to digitalize the world with connected sensors, deliver the most accurate and valuable data, and extract actionable insights with our partners.

Our vision is to continuously drive the society and environment towards a more connected, efficient, and sustainable future.



- AM319 · AM307
- AM103 · AM102L
- UG56
- Milesight IoT Cloud

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Indoor Air Quality Solution

iBox IAQ Kit



- VS121 · VS340
- DS3604 · UG56
- Milesight IoT Cloud

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Smart Office Solution

iBox CoWork Kit-A



- VS121 · WS101
- WS301 · WS156
- UC100 · UG56
- Milesight IoT Cloud

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Smart Office Solution

iBox CoWork Kit-B



- WS101 · WS201
- GS301 · VS330
- UC100 · UG56
- Milesight IoT Cloud

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Smart Restroom Solution

iBox Smart Restroom Kit



- WS101 · WS301
- AM103 · WS303
- WS558 · UC300
- UG56
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Smart Building Solution

iBox Smart Building Kit



- EM500-SMTC
- UC511
- UG56
- Milesight IoT Cloud

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Smart Agriculture Solution

iBox Smart Agriculture Kit



## Don't Know Where to Start? Talk with Our Experts

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