



iBox

SMART BUILDING KIT DATASHEET



◆ Introduction

Linovision iBox Smart Building Kit offers an easy-to-install LoRaWAN® smart building monitoring and control solution including a series of sensors, gateway and cloud platform. This kit can transform your environment into a smart, interconnected and comfortable space.

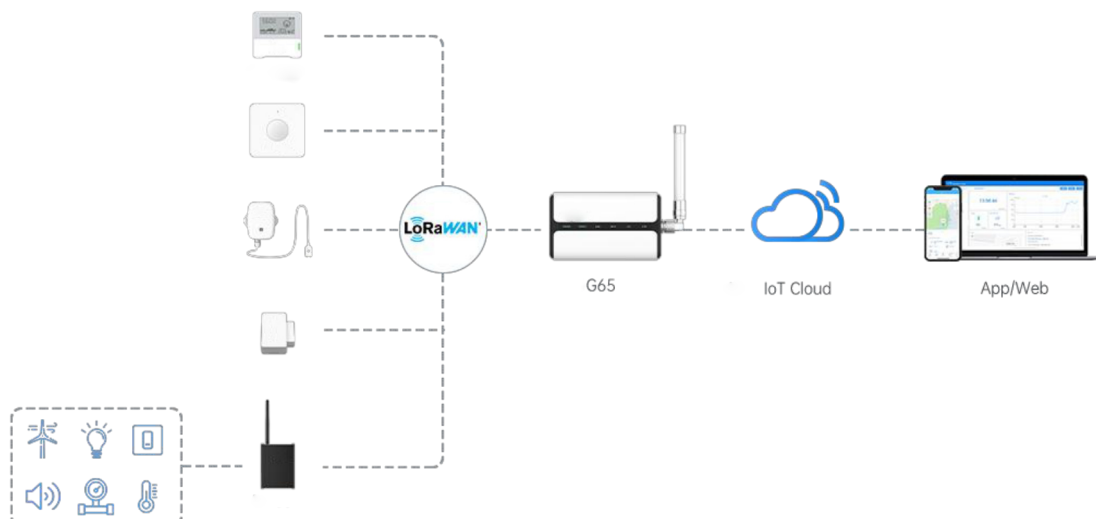
◆ Device List

Qty	Model	Description	LoRaWAN® Channel Plan
1	IOT-S500BT	Smart Button	CN470/RU864 /IN865/EU868/AU915 /US915/KR920/AS923
1	IOT-S500DCS	Magnetic Contact Switch	
1	IOT-S500-IAQ3	Indoor Ambience Monitoring IAQ Sensor	
1	IOT-S500WD-P	Spot Leak Detection Sensor	
1	IOT-C300	IoT Controller(LoRaWAN® Version)	
1	IOT-G65	Semi-Industrial LoRaWAN® Gateway (Wi-Fi and PoE Supported)	
1 Year	Linovision IoT Cloud	Pro 1 Standard Subscription	/

◆ Benefits

- Compliant with legacy equipments/sensors, fully cover the smart building scenarios including environment monitoring, leak detection, asset protection and remote control
- Plug and play, set up a simple LoRaWAN® network quickly within a few steps
- Support worldwide LoRaWAN® frequency plans including 470 MHz to 928 MHz
- Support local alarms via indicators or remote email and mobile push notifications
- Customize dashboards and maps to understand the building environment status intuitively

◆ Application Topology



◆ Features

Item	Description	Applications
IOT-S500BT Smart Button 	<p>This smart button supports sending different alerts depending on various press actions and can be used in emergency alarm system, remote control or other remote push button applications.</p>	<ul style="list-style-type: none"> • Easy to be carried out by the seniors and the disabled or to be installed anywhere • Remote control lights or curtains in office
IOT-S500DCS Magnetic Contact Switch 	<p>This sensor uses a magnet to detect the open/closed status of door/window or something has been moved. It's wire-free and can be easily mounted on the doors, panes, cabinets, etc.</p>	<ul style="list-style-type: none"> • Entry/fire door monitoring • Asset protection in the cabinets or boxes • Suitable for offices, homes or factories applications
IOT-S500-IAQ3 IAQ Sensor 	<p>This is a 3-in-1 ambience monitoring sensor including the measurement of temperature, humidity and CO₂ concentration and can display indoor status visually on the E-inkscreen in real-time and transmit to network server using LoRaWAN® technology.</p>	<ul style="list-style-type: none"> • Monitor temperature, humidity and CO₂ levels • Indicate CO₂ levels via traffic light or emoticon on the E-inkscreen • Suitable for office or school indoor air quality monitoring
IOT-S500WD-P Leak Detection Sensor 	<p>This sensor can detect the presence of liquids by a small probe based on the conductive principle. Besides, it equips temperature and humidity sensors to monitor the indoor and outdoor environment.</p>	<ul style="list-style-type: none"> • Pipe leak monitoring • Basement flooding detection • Machine room monitoring
IOT-C300 IoT Controller 	<p>IOT-C300 IoT controller equips with multiple data interfaces including digital inputs, relay outputs, RS232, RS485, analog inputs and PT100 RTD input, which can convert legacy sensors to work with LoRaWAN® network and control devices.</p>	<ul style="list-style-type: none"> • Acquire data from legacy sensors and send via LoRaWAN® networks • Control the on/off status via relay outputs or RS485 Modbus commands

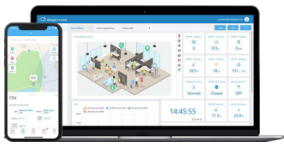
IOT-G65 Semi-Industrial LoRaWAN® Gateway



IOT- G65 semi-industrial indoor LoRaWAN® gateway provides stable connectivity between sensors and mainstream network servers or Linovision IoT cloud.

- Collect data from LoRaWAN® sensors
- Forward data to Linovision IoT Cloud or mainstream network servers via Ethernet or Wi-Fi

Linovision IoT Cloud



Linovision IoT Cloud provides unparalleled levels of vertical integration with Linovision LoRaWAN® gateways and sensors. It visualizes field data and enables user to monitor and control remote assets on an intuitive dashboard.

- Drag & Drop dashboard to display data
- Real-time alarm notifications
- Exportable historical data and generate reports
- Custom trigger conditions & actions to enable collaborative interaction among end-devices
- Android & iOS versions available

◆ Specifications

Smart Building Sensors

Model	IOT-S500BT	IOT-S500DCS	IOT-S500-IAQ3	IOT-S500WD-P
Sensor Type	Push Button	Magnetic Contact Switch	Temperature, Humidity, CO ₂	Temperature, Humidity, Leak
LoRa D2D	√	√	–	–
Hardware Interfaces				
Screen	–	–	2.13 Inch E-ink	–
LED	√	√	√	√
Buzzer	√	–	–	–
Reset Button	√	√	√	√
Tamper Button	–	√	–	–
Configuration	NFC	NFC	NFC	NFC
Physical Characteristics				
Power Supply	1 × 1650 mAh ER14335 Li-SOCl ₂ Battery	1 × 1200 mAh ER14250 Li-SOCl ₂ Battery	2 × 2700 mAh ER14505 Li-SOCl ₂ Batteries	1 × 4000 mAh ER18505 Li-SOCl ₂ Battery
Battery Life	Over 3 Years	Over 5 Years	Over 3 Years	Over 10 Years

Dimension	50 ×50 ×18 mm	Sensor: 50.5 ×31 ×18.5 mm Magnet: 30 ×13.5 ×10 mm	68 ×65 ×20.5 mm	105.6 ×85.3 ×27 mm
Operating Temperature	-30to +60℃	-20℃ to +60℃	-20to +60℃ (E-Ink Screen: 0 to +40℃)	30℃ to +70℃
Ingress Protection	IP30	IP20	IP30	IP67
Installation	On Flat Surfaces with Screws or 3M Tapes			

IOT-C300 IoT Controller

LoRaWAN	
Antenna Connector	1 ×50 ΩSMA Connector (Center PIN: SMA Female)
Mode	OTAA/ABP Class C
Advanced Feature	LoRa D2D Controller, LoRa D2D Agent
Hardware Interfaces	
Data Interfaces	4 ×Digital Inputs 2 ×Relay Outputs 1 ×RS232 (Transparent) 1 ×RS485 (Modbus RTU) 2 ×Analog Inputs (4–20mA) 2 ×Analog Inputs (0–10V) 2 ×PT100 RTD Inputs
Console Port	1 ×Type-C
LED Indicators	1 ×System, 1 ×ACT
Reset Button	1 ×RST
Physical Characteristics	
Power Supply	5–24 VDC
Operating Temperature	-20℃ to +60℃
Ingress Protection	IP30
Dimension	93 ×70 ×22 mm
Installation	Desktop, Wall Mounting, DIN Rail Mounting

Click [here](#) to get more specification details.

IOT –G65 Semi-IndustrialLoRaWAN® Gateway

LoRaWAN	
Chip	SX1302
Antenna	2 ×Internal Antennas +1 ×50 Ω N-Female External Connector
Channel	8 (Half/Full-Duplex)
Package Forwarder	Semtech, Basic Station, Loriot, Chirpstack, etc.
Network Server	Support
Hardware Interfaces	
Ethernet Port	1 ×10/100/1000Mbps (PoE PD)
Wi-Fi Interface	IEEE 802.11 b/g/n,2.4 GHz, Support AP and Client Mode
Console Port	1 ×Type-C
LED Indicators	1 ×POWER, 1 ×STATUS, 1 ×LoRa, 1 ×Wi-Fi, 1 ×LTE, 1 ×ETH
Reset Button	1 ×RST
Built-in	Watchdog, RTC, Timer
Physical Characteristics	
Power Supply	1. DC Jack Connector for 9–24VDC Power Supply 2. 1 ×802.3 af PoE Input
Operating Temperature	–40°C to +70°C
Ingress Protection	IP65
Dimension	180 x 110 x 56.5 mm
Installation	Desktop, Wall or Pole Mounting

Click [here](#) to get more specification details.

Linovision IoT Cloud

Features	Free	Pro 1	Pro 2	Pro 3
Manage Device				
Manage numbers(gateways +sensors)	10	50	100	300
Check historical data and chart		✓		
Export historical data and chart		✓		
Dashboard				
Create dashboards	2		10	
Widgets per dashboard	20		50	
Add custom map and charts		✓		
Share the dashboard		✓		
Control device in dashboard		✓		
Trigger				
Add trigger rules	20	100	200	600
Trigger execution times monthly	1,000	5,000	10,000	30,000
Report				
Generate daily/weekly/monthly report	–		✓	
Send reports via Emails	–		✓	
Check and export historical report	–		✓	
Event Notification				
Record device status and threshold events		✓		
Send Email notifications monthly	100		1,000	
Share and Transfer				
Share devices to other accounts with different permissions	–		✓	
Transfer devices to other accounts		✓		

Contact Linovision sales if you need to upgrade the subscription in the kit.