

ioThinX IloT Starter Kit

ioThinX 4500 starter kit for IloT applications



Features and Benefits

- Easily connect to an IT/OT cloud
- Ready-to-run, plug-and-play
- Modular design for greater versatility
- The IO boards support multiple IO modes
- Eco-friendly cardboard box design

Introduction

The ioThinX IloT Starter Kit allows you to experience the ioThinX 4500 Series' functionality, making it easier for you to get your applications up and running in no time. The starter kit includes one ioThinX 4500 Series product and one IO board. All of the devices in the kit are pre-wired so that you can start testing without going through the hassle of referring to and implementing complicated wiring diagrams. In addition, the ioThinX Starter Kit uses a portable, eco-friendly cardboard box design.

Easily Connect to an IT/OT Cloud

The ioThinX 4500 Series supports Modbus, MQTT, RESTful API, and SNMP protocols, giving users the freedom to use the protocols they are most familiar with for connecting to the cloud. Tech notes that show how to configure connections for each of the protocols are available for download from the ioThinX IloT Starter Kit product page, or by scanning the QR code inside the box.

Ready-to-Run, Plug-and-Play

The ioThinX 4500 Series device and I/O boards that come with the ioThinX IloT Starter Kit are pre-configured and pre-wired. To use the starter kit, just take it out of the box, plug it in, and you're ready to go.

Modular Design for Greater Versatility

The ioThinX 4510 Series device and I/O board are housed in separate units, giving users greater flexibility for different uses, such as debugging, maintenance, and conducting demos.

The IO Board Supports Multiple IO Modes

The IO board that comes with the starter kit has two buttons, two LEDs, and two knobs that connect to the ioThinX 4500's DI, DO, and AI, respectively. Users can change the IO board's IO status and read the IO data change on the ioThinX 4500 product and vice versa. The DIP switch on the IO board can be used to change the IO mode.

Eco-friendly Cardboard Box Design

The ioThinX IloT Starter Kit uses a lightweight, eco-friendly, cardboard box design. All of the starter kit's components come preinstalled inside the box. The starter kit is lightweight and highly portable. In fact, you can easily fit the box inside a 20-inch carry-on for easy transport to offsite demonstrations.

Specifications

Input/Output Interface

Digital Input Channels	45MR-1601: 16
Digital Output Channels	45MR-2600: 16
Analog Input Channels	45MR-3800: 8

Buttons	Reset button
Isolation	3k VDC or 2k Vrms
Digital Inputs	
Connector	Spring-type Euroblock terminal
Sensor Type	Dry contact Wet contact (PNP)
Digital Outputs	
Connector	Spring-type Euroblock terminal
I/O Type	Sink
Analog Inputs	
Connector	Spring-type Euroblock terminal
I/O Mode	Current
Input Range	0 to 20 mA 4 to 20 mA 4 to 20 mA (with burn-out detection)
Ethernet Interface	
10/100BaseT(X) Ports (RJ45 connector)	2, 1 MAC address (Ethernet bypass)
Magnetic Isolation Protection	1.5 kV (built-in)
Ethernet Software Features	
Configuration Options	Web Console (HTTP)
Industrial Protocols	Modbus TCP Server (Slave), RESTful API, SNMPv1/v2c/v3, MQTT
Serial Interface	
Connector	Spring-type Euroblock terminal
No. of Ports	2 x RS-485 (2 wire)
Stop Bits	1, 2
Serial Signals	
RS-485-2w	Data+, Data-, GND
Serial Software Features	
Industrial Protocols	Modbus RTU Client (Master)
Power Parameters	
Input Voltage	12 VDC
System Power Parameters	
No. of Power Inputs	1
Power Connector	Spring-type Euroblock terminal
Power Consumption	1100 mA @ 12 VDC

Physical Characteristics

Dimensions	400 x 170 x 116 mm (15.75 x 6.69 x 4.57 in)
Weight	2000 g (4.41 lb)

Package Contents

Device	1 x ioThinx 4510 1 x 45MR-1601 1 x 45MR-2600 1 x 45MR-3800
Accessory	1 x I/O board
Power Supply	1 x power adapter with US/EU/UK/AU plug

Ordering Information

Model Name	System	MR Modules	I/O Boards
ioThinx SK-4510	ioThinx 4510	3	1

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