ioLogik 2500 Series
Quick Installation Guide

Smart Remote I/O
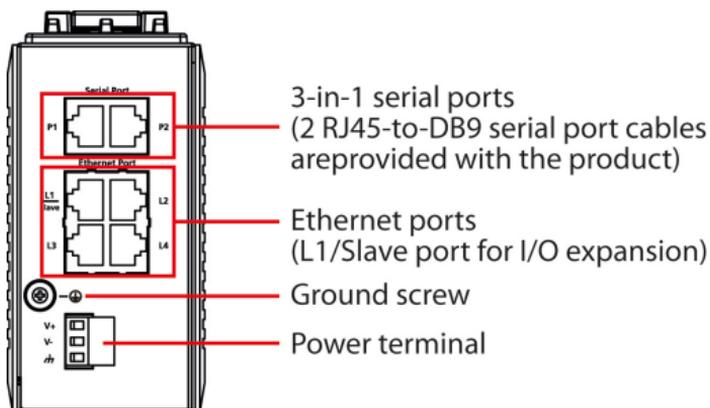
Version 6.1, January 2021
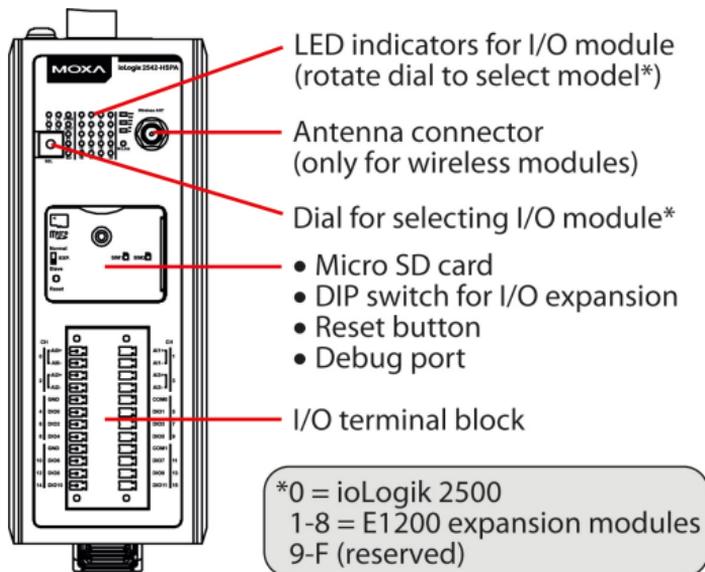
MOXA®

Package Checklist

- ioLogik 2500 series device
- 3-pin screw terminal block (for power input)
- 2 12-pin screw terminal blocks (for I/O)
- 2 8-pin RJ45-to-DB9 cables (CBL-RJ45M9-150)
- 1 antenna (only for wireless modules)
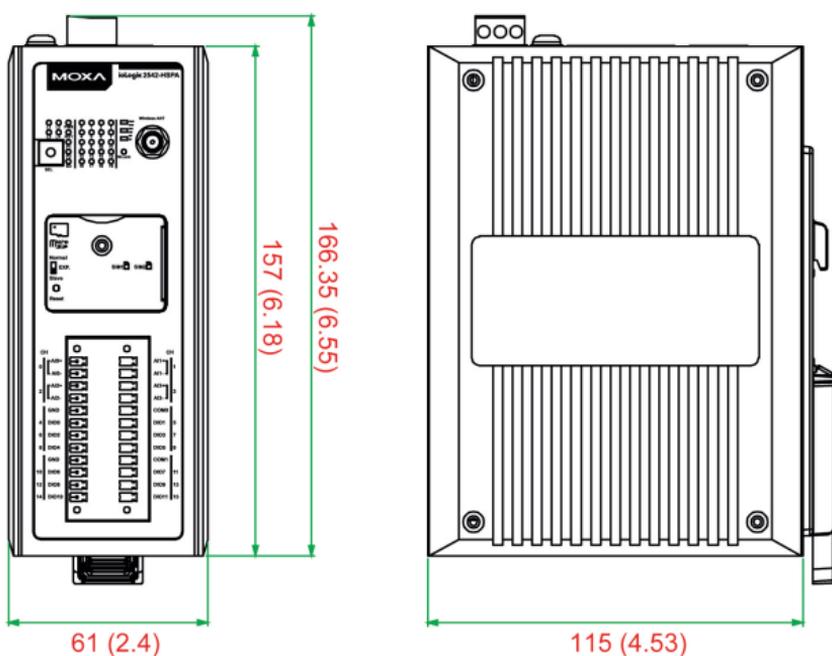- Quick installation guide (printed)

Appearance

Top View

3-in-1 serial ports
(2 RJ45-to-DB9 serial port cables
areprovided with the product)

Ethernet ports
(L1/Slave port for I/O expansion)

Ground screw

Power terminal

Front View

LED indicators for I/O module
(rotate dial to select model*)

Antenna connector
(only for wireless modules)

Dial for selecting I/O module*

- Micro SD card
- DIP switch for I/O expansion
- Reset button
- Debug port

I/O terminal block

*0 = ioLogik 2500
1-8 = E1200 expansion modules
9-F (reserved)

Physical Dimensions (unit = mm/inch)

Specifications

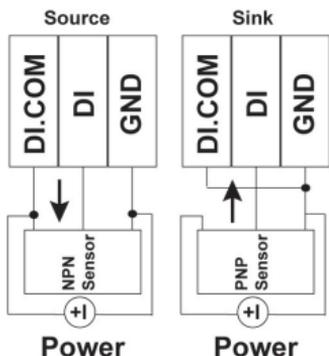| Input Current	ioLogik 2512 Series:	254 mA @ 24 VDC,
		529 mA @ 12 VDC,
		133 mA @ 48 VDC
	ioLogik 2512-GPRS Series:	416 mA @ 24 VDC
	ioLogik 2512-HSPA Series:	352 mA @ 24 VDC,
		728 mA @ 12 VDC,
		187 mA @ 48 VDC
	ioLogik 2512-WL1 Series:	354 mA @ 24 VDC,
		735 mA @ 12 VDC,
		189 mA @ 48 VDC
	ioLogik 2542 Series:	281 mA @ 24 VDC,
		589 mA @ 12 VDC,
		144 mA @ 48 VDC
	ioLogik 2542-GPRS Series:	494 mA @ 24 VDC
	ioLogik 2542-HSPA Series:	311 mA @ 24 VDC,
		649 mA @ 12 VDC,
		166 mA @ 48 VDC
	ioLogik 2542-WL1 Series:	380 mA @ 24 VDC,
		797 mA @ 12 VDC,
		203 mA @ 48 VDC
Input Voltage	12 to 48 VDC	
Operating Temperature	Standard Models: -10 to 60°C (14 to 140°F)	
	Wide Temp. Models:	
	Ethernet: -40 to 75°C (-40 to 167°F)	
	Wireless: -30 to 70°C (-22 to 158°F)	
Storage Temperature	-40 to 85°C (-40 to 185°F)	

Hardware Installation

I/O Wiring

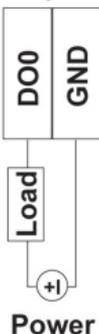### Digital Inputs/Outputs

Analog Inputs
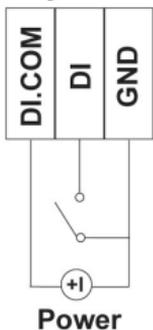
DI Dry Contact   **DI Wet Contact**   **DO (Sink)**   **Voltage/Current**

Mounting

There are two sliders on the back of the unit for DIN rail and wall mounting.

- **Mounting on a DIN rail**

  Step 1: If the spring-loaded bracket is locked in place, push the recessed button to release it.

  Step 2: Insert the top of the rail into the upper lip of the attachment plate's slot.

  Step 3: The attachment unit should now snap into place along the rail.

- **Mounting on a wall (optional)**

  Step 1: Remove the DIN rail attachment plate.

 **Step 2:** Install the wall mounting kit to the back of the unit with M3 screws.

  Step 3: Install the unit to the wall. The heads of the screws should be less than 6.0 mm in diameter, and the shafts should be less than 3.5 mm in diameter, as shown in the figure at the right.
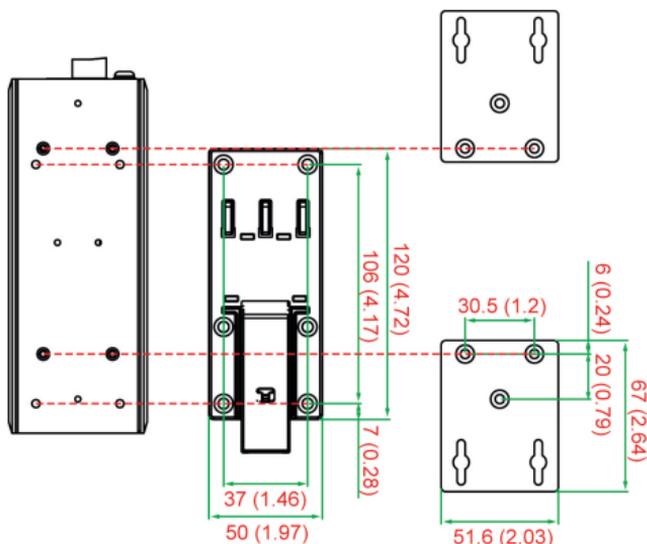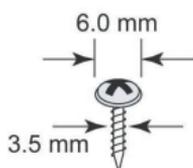
Connecting the Power

The ioLogik 2500 can receive power from a 12 to 48 VDC power source. Input power is applied to the positive (V+) and negative (V-) terminals on the connector.

For most applications, it is desirable to ground the system by connecting the system's power supply function ground (FG) to the power terminal's ground and the chassis ground (indicated with red markings in the image at the right).

Power Supply
+24 VDC Nominal
(+12 to 48 VDC)
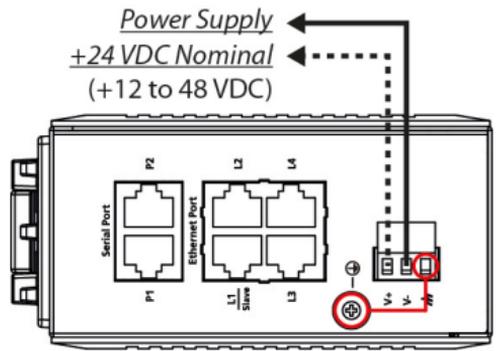
NOTE For safety reasons, wires connecting the power supply should be *at least* 2 mm in diameter (e.g., 12 gauge wires).

Connecting to a Network

The ioLogik 2500 has four built-in RJ45 Ethernet ports for connecting standard direct or crossover Ethernet cables.

LED Indicators

Type	Color	Description
Power (PWR)	Green	System power is ON
	Off	System power is OFF
Ready (RDY)	Green	System ready
	Red	System error
	Off	System is not ready
Ethernet Port (L1/L2/L3/L4)	Green	Ethernet connection enabled in 100 Mbps
	Amber	Ethernet connection enabled in 10 Mbps
	Flashing	Data transmitting
	Off	Disconnected
Serial Port (P1/P2)	Green	Tx
	Amber	Rx
	Flashing	Data transmitting
	Off	Disconnected
SD	Green	SD card inserted
	Flashing	SD card being accessed
I/O Channel Status*	Green	Channel ON
	Off	Channel OFF or No Counter/Pulse Signal
W.Link**	Green	Cellular connection established
	Off	Off
Signal Status**	Off	No signal, or No SIM card
	1 LED	Weak or insufficient (SMS only)
	2 LEDs	Average (good for cellular connections)
	3 LEDs	Excellent signal

*Use the rotary switch to select which module's I/O channel status is displayed.
**Wireless Modules Only.

System Configuration

Configuration via IOxpress Utility

The configuration of the ioLogik 2500 is mainly done with the IOxpress utility. IOxpress is a search utility that helps users locate an ioLogik 2500 device on the local network. The latest version of the utility can be downloaded from Moxa's website.

- Default IP Address: 192.168.127.253
- Default Subnet Mask: 255.255.0.0

NOTE Be sure to configure the host PC's IP address to the same subnet as the ioLogik 2500. For example, 192.168.127.250

Load Factory Default Settings

There are three ways to restore the ioLogik 2500 to factory default settings.

1. Hold the **RESET** button for 5 seconds.
2. In the **IOxpress** utility, right-click on the ioLogik device to be reset and select **Reset to Default.**
3. Select **Load Factory Default** from the web console.

⚠️ **WARNING**

This equipment is intended to be used in Restricted Access Locations. External metal parts are hot! Before touching it, special attention or protection is necessary.

How to Download the Software

Step 1: Click on the following link to open the Support & Downloads search tool:
http://www.moxa.com/support/support_home.aspx?isSearchShow=1

Step 2: Type the model name in the search box or select a product from the drop down box and then click **Search**.

Support & Downloads

| 2512-HSPA | Search |

OR

| select product ▼ |

Please choose a model :

∘ ioLogik 2512-HSPA

Step 3: Click the **Software Packages** link to download the latest software for the product.

ioLogik 2512-HSPA

Documentation
• Datasheets
• Manuals

Software
• Firmware
• Libraries
• Software Packages
• Utilities

Other
• Product Page

ATEX Information

1. Certificate number: DEMKO 15 ATEX 1603X
2. Certification string: Ex nA IIC T4 Gc
3. Standards covered:
   EN 60079-0:2012+A11:2013, EN 60079-15:2010
4. The equipment shall be installed in an enclosure that provides a degree of protection not less than IP54 in accordance with EN 60079-15 and accessible only by the use of a tool.
5. These products are for use in an area of not more than pollution degree 2 in accordance with EN 60664-1.