ioLogik 2500 Series
Quick Installation Guide

Smart Remote I/O

Version 6.2, March 2024

Technical Support Contact Information
www.moxa.com/support

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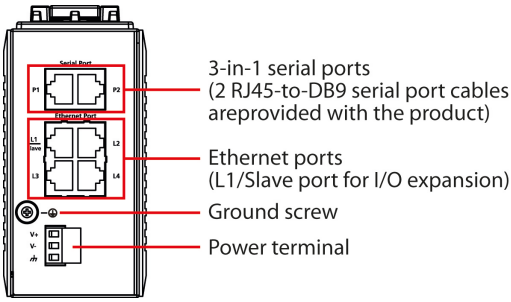
P/N: 1802025000035

Package Checklist

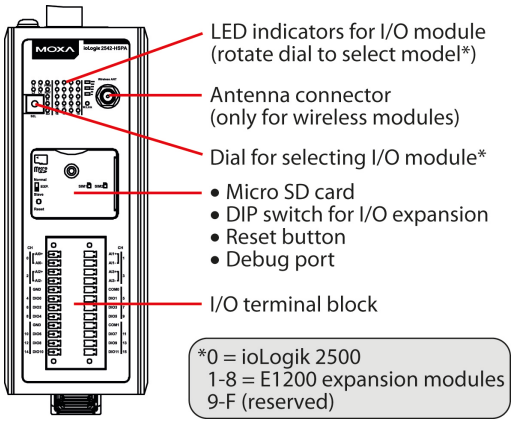
- ioLogik 2500 Series device
- 3-pin screw terminal block (for power input)
- 2 12-pin screw terminal blocks (for I/O)
- 2 8-pin RJ45-to-DB9 cables (CBL-RJ45M9-150)
- 1 antenna (only for wireless modules)
- Quick installation guide (printed)

Appearance

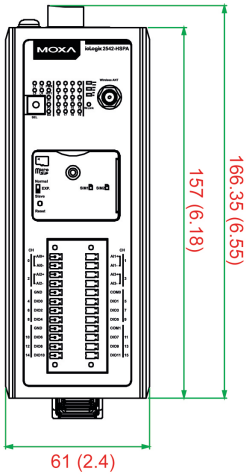
Top View

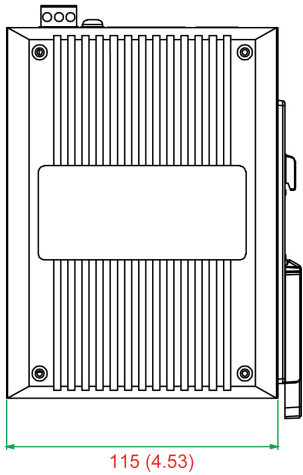


Front View



Physical Dimensions (unit = mm/inch)





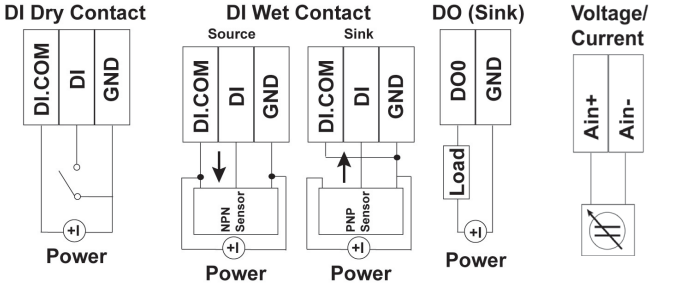
Specifications

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**



NOTE Install the wiring for IO terminal blocks using 22-16 AWG (0.32-1.31 mm2), a torque value of 3 lb-in, and a wire strip length of 5.5-6.5 mm.

Mounting

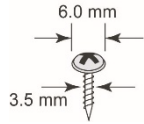
There are two sliders on the back of the unit for DIN rail and wall mounting.

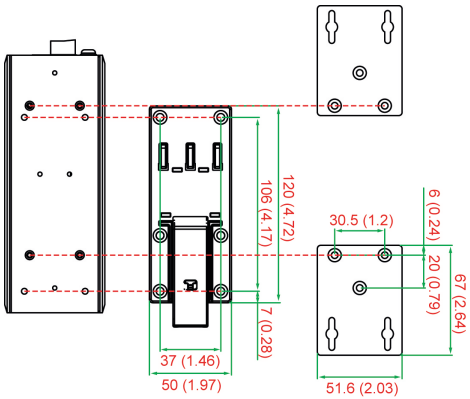
- **Mounting on a DIN rail**

  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.

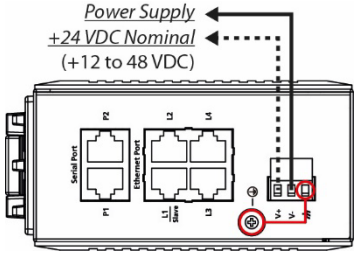




Connecting the Power

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).



NOTE You should install the wiring for the power input terminal block using 20-12 AWG (0.5-3.31 mm2), applying a torque value of 7 lb-in and stripping the wire length to 4-5 mm.

WARNING

- One individual conductor is in each clamping point.
- Conductors suitable for an ambient temperature of 103°C must be used for the power input terminal block.
- Run the ground connection from the ground screw (M5 type) to the grounding surface prior to connecting devices.

Connecting to a Network

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

- Default IP Address: **192.168.127.253**
- Default Subnet Mask: **255.255.0.0**
- Default Username: **admin**
- Default Password: **moxa**

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.

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.

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.

ATEX Information

1. Certificate number: DEMKO 15 ATEX 1603X
2. Certification string: Ex ec nC IIC T4 Gc
3. The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC/EN 60079-0 and accessible only by the use of a tool.
4. These products are for use in an area of not more than pollution degree 2 in accordance with EN 60664-1.

Address of Manufacturer
No. 1111, Heping Rd., Bade Dist., Taoyuan City 334004, Taiwan