Serial Device Servers

Choosing Your Best Fit: Key Considerations for Selecting an NPort

Application
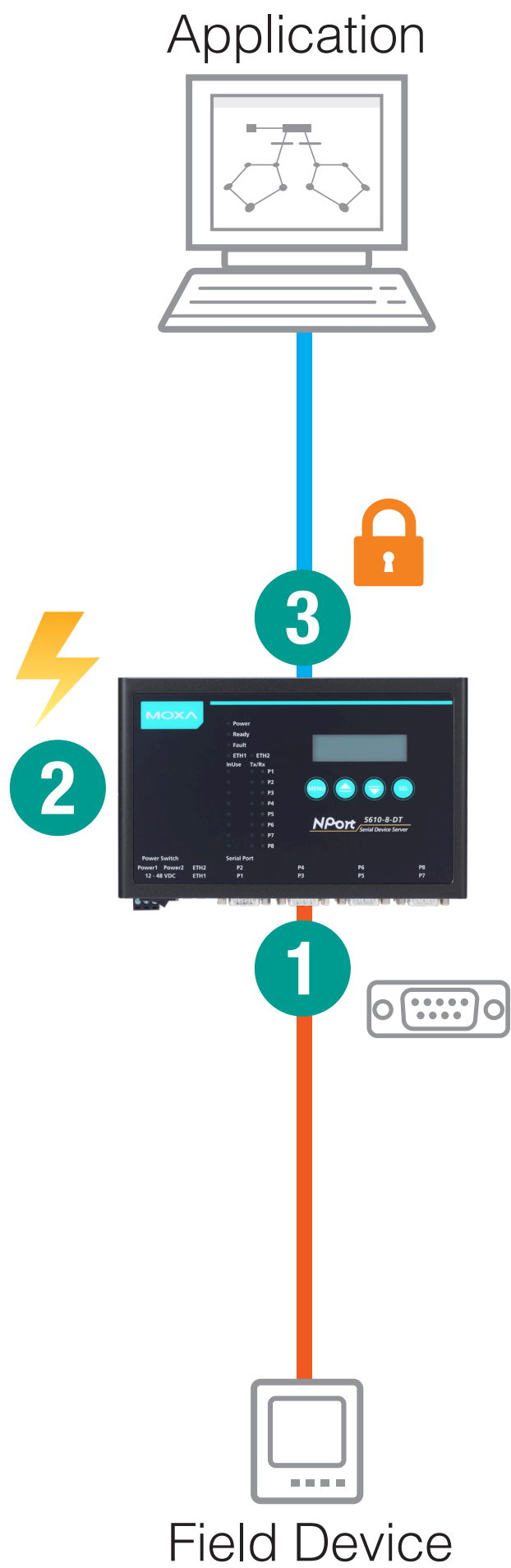
Field Device

1 Number of Ports:

Q: How many serial field device need to be connected? Which interface is required?

Ethernet | Serial — Point-to-point, RS-232 or RS-422

Serial — Multipoint (cascading), RS-485, max 31 connected devices
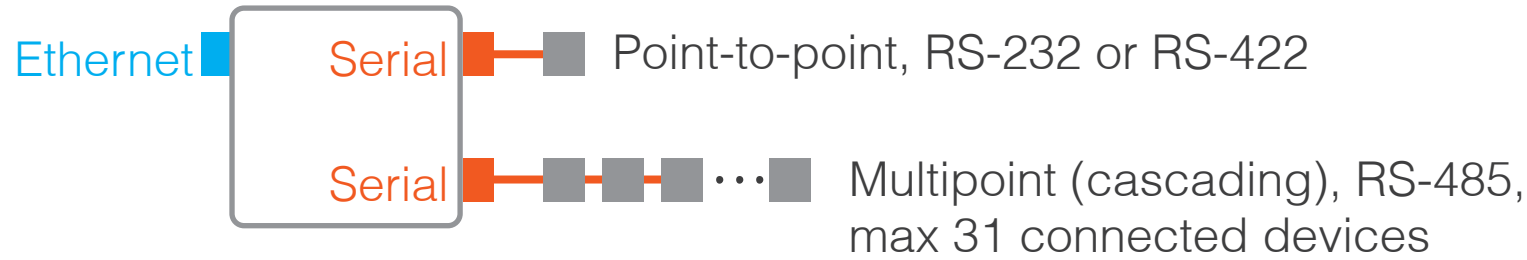
The NPort has **1 to 16 ports** with interface option for **RS-232, RS-422, or RS-485**.

3 Cybersecurity:

Q: Is the integrity of serial data a big concern in your application? Is your organization using a centralized database to authenticate remote users (such as RADIUS)?

All NPort solutions come with standard cybersecurity features such as **Login Authentication** and **Network Access Control**. Advanced security functions such as **data encryption** or support of **authentication servers** are available in the NPort 6000 Series.

2 Operational Environment:

Evaluating the environment where the NPort will be deployed.

Q1: What is ambient temperature?

The NPort supports **standard (0~60°C)** and **wide temperature (-40~75°C)** solutions.

Q2: Does the possibilty for potential voltage difference exist between serial devices, such as different power sources, that might trigger ground loop?

The NPort with **serial isolation** is designed to stop transients caused by ground loop and protect serial devices from being damaged.

Q3: Is there any possibility of having a short, fast increase in voltage, such as lightning or switching power, that may cause an increase in electrical current?

The NPort with **surge protection** is designed to prevent damage or impairment caused by surge.

Q4: Does the application require industrial certifications?

The NPort supports hazardous locations certification (such as **C1D2, ATEX and IECEx**) for industry-specific needs.

NPort Series

Serial Device Servers

Standard
General purpose application

Wireless
Connect to 802.11 a/b/g/n Wi-Fi network

Rugged Design
Harsh environments industrial certifications

Standard
General purpose application

Compact
High-port density in small form factor

		1/2/4 port			8/16 port	
	Model	**5100A, 5200A, 5400**	**W2150A, W2250A**	**IA5100A, IA5200A, IA5400A**	**5600**	**5600-DT, 5600-DTL**
Basic	Serial Ports	1-4	1-2	1-4	8/16	8
	RS-232/422/485	●	●	●	●	●
	Ethernet	1	1	2	1	1
	Window/Linux Driver	●	●	●	●	●
Security	Login Authentication	Password Protection (length, character enforcement)	Password Protection (length, character enforcement)	Password Protection (length, character enforcement)	Password Protection (length, character enforcement)	Password Protection (length, character enforcement)
	Console Management	● HTTPS ● Unused services can be disabled	● HTTPS ● Unused services can be disable	● HTTPS ● Unused services can be disabled	● HTTPS ● Unused services can be disabled	● HTTPS ● Unused services can be disabled
	Network Access Control	Accessible IP List	Accessible IP List (For operation modes only)	Accessible IP List	Accessible IP List	Accessible IP List
Reliability	Industrial Certifications	-	-	C1D2, ATEX, IECEx	-	-
	Serial Isolation	●	-	●	●	●
	Wide Temperature	●	●	●	●	●