SDX Pro

Modular SD-WAN Router with Edge Computing Capability

FAQ

peplink

peplink.com

What is the SDX Pro?

What is the SDX Pro?

The SDX Pro is a modular SD-WAN router that offers extreme performance, a future-proof design, and edge computing capability. Along with two FlexModule slots, the SDX Pro enables you to customize the router with your choice of ports. The SDX Pro supports edge computing, so it can deliver websites, applications, and docker containers to connected devices.

How fast is this device?

The SDX Pro has a Stateful Firewall Throughput of 24Gbps. The SpeedFusion VPN Throughput with no encryption is 1Gbps, and the SpeedFusion VPN Throughput with AES-256 encryption is 600Mbps.

A complete Spec Sheet can be found [here](#).

What certifications does the SDX Pro have?

The SDX Pro has certifications on:

- FCC, CE, IC, and RoHS

How many versions of the SDX Pro does Peplink offer?

We currently offer three versions of the SDX Pro:

- Balance SDX Pro (500 GB SSD) ([BPL-SDX-PRO-M2](#))
- Balance SDX Pro (1 TB SSD) ([BPL-SDX-PRO-M2-1TB](#))
- Balance SDX Pro (2 TB SSD) ([BPL-SDX-PRO-M2-2TB](#))

All versions of the SDX Pro share the same hardware interface and except different volumes of SSD.

What is the best use case for the SDX Pro?

The answer isn't set in stone as the SDX Pro is suitable for a wide variety of vertical deployments. Industrial IoT, Mobile HealthCare, Remote site extreme performance etc. are some examples.

Click here and we can work out a cost-effective solution with the best overall performance together.

How many ways can the SDX Pro connect to the Internet?

The SDX Pro has 2x 10G SFP+ WAN ports, 2x GE WAN ports, 2x USB WAN ports, and 2x FlexModule slots.

What are the SFP WAN ports used for?

In an enterprise or campus network, the distance between each building and department is often longer than 100m. Using fiber can give you a longer transmission distance from point to point. This is something a copper cable cannot handle, not to mention the fiber connection is more reliable and safer, due to its properties.

What is the OLED control panel used for?

The OLED control panel gives the ability to check the status of the SDX Pro, including the status of WAN links, LAN links, and the SpeedFusion tunnels. It can also boot to the alternative firmware at boot time.

You can find information regarding the OLED Display Menu on page 76 of the User Manual.

What is included with the SDX Pro?

What is in the box?

Along with the SDX Pro, there are: 1x SDX Pro Base Chassis, 1x 1U 19" Rack-mount Chassis ([ACW-752](#)), an L-mount Set ([ACW-750](#)), 1x Power Cord ([ACW-614](#)), and a Rubber Foot Pad set.

Is a warranty included with this product?

Yes. It comes with a 1-year warranty which is extendable on a year-to-year basis. These can be purchased from our [Certified Partners](#) or directly from the Peplink store at the time of the sale or thereafter.

	SDX Pro (500GB SSD) ([BPL-SDX-PRO-M2](#))	SDX Pro (1TB SSD) ([BPL-SDX-PRO-M2-1TB](#))	SDX Pro (2TB SSD) ([BPL-SDX-PRO-M2-2TB](#))
EssentialCare	[1 Year](#)	[2 Year](#)	[1 Year](#)	[2 Year](#)	[1 Year](#)	[2 Year](#)
SmartCare	[1 Year](#)	[3 Year](#)	[1 Year](#)	[3 Year](#)	[1 Year](#)	[3 Year](#)

What is the difference between EssentialCare and SmartCare?

EssentialCare is a subscription that bundles InControl, a warranty, and SpeedFusion Connect Protect usage into a single package. Click [here](#) to learn more about EssentialCare.

SmartCare is similar to EssentialCare. SmartCare also bundles InControl, a warranty, and SpeedFusion Connect Protect usage into a single package. Different from EssentialCare, SmartCare provides advanced hardware placement for Return Material Authorization (RMA).

What is SpeedFusion Connect Protect?

SpeedFusion Connect Protect is Peplink's global network of SpeedFusion endpoints. With an active CarePlan or SpeedFusion Connect Protect data plan, you can utilize SpeedFusion wherever you are, eliminating the need for any additional hardware. Unsure of what you need? Check out this useful post.

Does the SDX Pro employ Peplink's SpeedFusion technology or SpeedFusion VPN?

All Peplink products are capable of using SpeedFusion VPN. The SDX Pro supports SpeedFusion Hot Failover, WAN Smoothing, Bandwidth Bonding etc.

What is SpeedFusion technology?

Peplink's patented SpeedFusion technology is a powerful VPN tunnel equipped with a variety of technologies such as Hot Failover, WAN Smoothing, Bandwidth Bonding, and much more. This empowers users with the flexibility and tools required to achieve unbreakable connectivity in any vertical or scenario that they might find themselves in. Click here to learn more about SpeedFusion.

How can I purchase a license for SpeedFusion Connect Protect with higher traffic speed and additional usage?

Easy. Look here!

What is Edge Computing? What is the advantage of Edge Computing?

Edge Computing is a distributed information technology architecture in which client data is processed at the periphery of the network, which in this case is the SDX Pro.

The SDX Pro is a one-box hosting solution that can deliver Docker containers, applications, and websites to its local network. By hosting resources near the network edge, you can reduce latency and make applications more responsive.

FlexModule

What is the application of the FlexModule?

Peplink provides a variety of FlexModules that enable you to customize the router to suit your needs. The FlexModule slot enables you to apply new technology when it is released and available. The FlexModule enables the SDX complete flexibility.

How many types of the FlexModule does Peplink offer?

What types of features do you want to apply to your SDX?	Which FlexModule fits your requirement?			
Extra Ethernet ports with PoE	**8x GE PoE+ Module** ([EXM-8C](#))			
Extra Fiber ports	**4x SFP+ Module** ([EXM-4F](#))			
Extra LTE Modem	**3x LTE-A Module (CAT-6)*** ([EXM-3LTEA-W](#) / [EXM-3LTEA-P](#))	**3x LTE-A Pro Module (CAT-12)*** ([EXM-3LTEA-R](#) / [EXM-3LTEA-K](#))	**4x LTE-A Pro Module (CAT-12)*** ([EXM-4LTEA-R](#) / [EXM-4LTEA-K](#))	**2x LTE-A Pro Module (CAT-18)*** ([EXM-2GLTE-G](#))
Extra 5G Modem	**2x 5G Module*** ([EXM-2X5GD](#))			

*Antennas are not included for FlexModules with an LTE modem or 5G modem.

There are two versions of the **3x LTE-A Module (CAT-6): For America and Europe** ([EXM-3LTEA-W](#)) / **For Asia Pacific** ([EXM-3LTEA-P](#)); Two versions of the **3x LTE-A Pro Module (CAT-12): For America and FirstNet** ([EXM-3LTEA-R](#)) / **For Global** ([EXM-3LTEA-K](#)); Two versions of the **4x LTE-A Pro Module (CAT-12): For America and FirstNet** ([EXM-4LTEA-R](#)) / **For Global** ([EXM-4LTEA-K](#)).

A complete Spec Sheet of the FlexModules can be found [here](#).

What is the speed of the FlexModule?

All Peplink products are capable of using SpeedFusion VPN. The SDX supports SpeedFusion Hot Failover, WAN Smoothing, Bandwidth Bonding etc.

	3x LTE-A Module (CAT-6) (EXM-3LTEA-W / EXM-3LTEA-P)	3x LTE-A Pro Module (CAT-12) (EXM-3LTEA-R / EXM-3LTEA-K)	4x LTE-A Pro Module (CAT-12) (EXM-4LTEA-R / EXM-4LTEA-K)	2x LTE-A Pro Module (CAT-18) (EXM-2GLTE-G)	2x 5G Module (EXM-2X5GD)
Downlink Data Rate	300Mbps	600Mbps	600Mbps	1.2Gbps	5G: 4Gbps LTE (CAT-20): 2Gbps
Uplink Data Rate	50Mbps	150Mbps	150Mbps	150Mbps	5G: 700Mbps LTE (CAT-20): 150Mbps

How can I upgrade the FlexModule?

Here is the FlexModule upgrade video and the FlexModule upgrade guide for the SDX Pro.

Is a warranty included with the FlexModule?

Yes. Every FlexModule comes with a 1-year subscription to EssentialCare.

	FlexModule Plus LTE-A (All modules with an LTE modem)	FlexModule Plus 5G	SIM Injector FlexModule
EssentialCare	1 Year	2 Year	1 Year	2 Year	1 Year	2 Year
SmartCare	-	-	1 Year	3 Year

Which Peplink antenna is compatible with the FlexModule Plus?

All Peplink antennas with SMA connectors are compatible with the FlexModule Plus. Our Indoor LTE/5G cellular antenna (ACW-235) is a regular choice of antennas.

To achieve better performance, we recommend you use an antenna from the Mobility antenna series (Mobility 40G) and the IoT antenna series (IoT 20G).
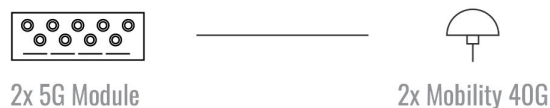
Antenna Guide

4x LTE-A Module (CAT-12)   2x Mobility 40G

Antenna Guide

2x LTE-A Pro Module (CAT-18)   2x Mobility 40G

Antenna Guide

2x 5G Module   2x Mobility 40G

You can click here to learn more about Peplink antennas.

Is it a must to connect antennas to all the antenna connectors for the 2x 5G Module (EXM-2X5GD)?

The 2x 5G Module (EXM-2X5GD) has 2x 5G modems. Each 5G modem comes with 4x RF connections for antennas so there will be a total of 8x RF connections. The connectors of each 5G modem are labelled as Main A, Main B, Aux A, and Aux B.

For the best performance and reliability, we highly recommend connecting antennas to all 8x RF connectors for the 2x 5G Module. These antennas should be of the same type and performance.

In certain circumstances where there are only two antennas available for a single 5G modem, please connect the antennas to the Connectors Main A and Aux A of the 2x 5G Module.

5G

If you have questions about the SDX Pro like:

Q. Do Peplink 5G devices support Sub-6 or mmWave?

Q. Are Peplink Mobility or Maritime antennas compatible with the FlexModule inserted in the SDX Pro?

Q. How does SpeedFusion work with the 5G network?

You can find all the answers in -> 5G Q&A (Combined).

Using the SDX Pro

Q. Why would I use SpeedFusion VPN?

SpeedFusion VPN is a capability built into the SDX Pro. It permits the user to construct a VPN tunnel between peplink devices. This tunnel may be set up to be unencrypted or even encrypted with AES-256 encryption. For example, if you have an SDX Pro at the office and a Peplink Balance series router at another location, you can establish a connection between the two locations and allow the flow of resources from one location to the other (Either a Layer 2 or Layer 3 tunnel may be constructed).

What is the maximum number of SpeedFusion VPN Peers of the SDX Pro?

The maximum number of SpeedFusion VPN peers of the SDX Pro is 800. .

What is the maximum power consumption?

The SDX Pro requires a 140W consumption for the main chassis, and a 20W consumption for the optional module.

The SDX Pro also requires 420W for all the PoE ports to function.

What voltage is required?

You can power it with a 100 - 240V AC Input.

Are there any measures that prevent the SDX Pro's power from being interrupted?

The SDX Pro is equipped with two power inputs and two hot-swappable power supplies. Only one of each is needed to function, ensuring continuous power delivery even if a cable gets disconnected or if a power supply drops out for any reason.

Does the SDX Pro support PoE Output features?

Yes. If you have installed 8x GE PoE+ Module (EXM-8C) to both SDX Pro FlexModule slots, there will be 16 extra GE ports that are capable of PoE functionality.

The two default GE WAN ports of the SDX Pro do not support PoE Output features.

Does the SDX Pro employ WAN as LAN features?

Yes. The SDX Pro has 2 GE WAN ports. These two WAN ports are configured as LAN ports by default, and configuration is changeable on the Web Admin.

If you have installed the **8x GE PoE+ Module** (EXM-8C), there will be 8 extra GE ports. These 8 GE ports can be configured as either a WAN port or a LAN port.

The SDX Pro & Public Safety

Can the SDX Pro use Band 71?

Yes. The SDX Pro can use Band 71 when a **2x LTE-A Pro Module (CAT-18)** (EXM-2GLTE-G) or a **2x 5G Module** (EXM-2X5GD) has been installed in the FlexModule slot.

Band 71 is a frequency band provided by T-Mobile, operating at a 600MHz frequency, traveling twice as far, and working 4 times better than conventional LTE bands in buildings. You can insert your T-Mobile SIM into any cellular slot of the FlexModule to use Band 71.

What is FirstNet Ready? Does the SDX Pro support FirstNet?

FirstNet is the only network where Public Safety can take advantage of the highest power class signaling available across the United States. With FirstNet MegaRange, High Power User Equipment solutions are exclusively available on Band 14.

The SDX Pro is FirstNet Ready with a **3x LTE-A Pro Module(CAT-12)-For America/FirstNet** (EXM-3LTEA-R) or **4x LTE-A Pro Module(CAT-12)-For America/FirstNet** (EXM-4LTEA-R), providing additional coverage as the situation demands.

Click here to learn more about how Peplink technology works with FirstNet.

License and Accessories

How can I subscribe to the InControl service?

The SDX Pro comes with a 1-year subscription to EssentialCare, which includes InControl.

Both extending EssentialCare beyond the first year and subscribing to SmartCare includes the InControl function.

Can it connect to an OpenVPN server from a commercial VPN provider (ExpressVPN, ProtonVPN, etc)?

Yes. An optional license (LIC-OPN-WAN) will enable the OpenVPN WAN functionality.

It seems like there are a lot of options here. Could this become very expensive?

We intend to allow the buyer to acquire the router at a very reasonable cost and to only add the options that are found to be necessary to meet their requirements.

What can I do if I need support?

Does Peplink offer support for this product? What if I have difficulties setting it up?

First, Peplink partners always provide support to the users of the products they have sold to, so always reach out to the place of purchase first.

For those who prefer self-service, Peplink has a very active forum. Among the regular forum, users are Peplink Partners, Peplink employees, and many very knowledgeable users. Generally, folks with questions get answers rather quickly. In the unlikely event of a suspected hardware or firmware issue, you can enter a support ticket with Peplink directly. You will then receive attention from some of the best engineers! Peplink supports its owners like no other.

I can't access the Internet via the SDX Pro. What can I do in the first place?

Visit this link (troubleshooting section) for a basic software walkthrough and troubleshooting guide. If you need further assistance, please reach out to us on our forum, and the team will get you online.