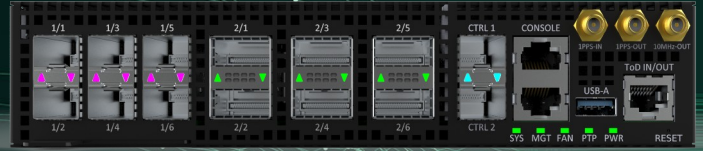


Advanced Programmable Switches

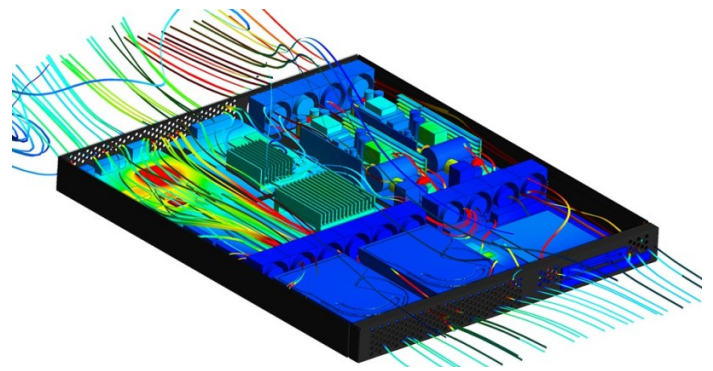


Mechanical Packaging is much more than a Metal Box

A common component of a product or module design is to provide the mechanical design. In fact, in optimized high performance and high speed system designs, it can be mandatory for the mechanical housing to be considered in lock step as a part of the overall system design.

There are many factors that drive such requirements:

- Precise mechanical dimensions and appearance to match existing products or modules in the same product series.
- Leverage the metal housing as integral heat conductive surface in contact with the electronics for sake of conductive, radiant and convection cooling.
- Consideration of overall chassis airflow and direction, ensuring that circuit boards, mounted components and RF shielding do not create airflow 'dead spots', while ensuring holes in modules are sufficient in size and line up with overall system cooling design.
- Sufficient mechanical strength and ruggedness, especially important where requirement of intended location indicate possible direct impact, vibrations and shock.
- Environmental factors such as operating temperature range, moisture, and humidity.
- Complex mechanical designs that include modules that slide in and are removable that mate with connectors including hot-swappable modules that provide redundancy and serviceability.
- Electromagnetic emissions and susceptibility, where mechanical housing acts as a Faraday cage and other shielding.
- Mechanical housing acts as an efficient method to achieve 'low noise' through common grounding and decoupling.



Products, modules, and circuit board designs created by APS Networks and its design partners are used in applications from office environments to datacenters.

Mechanical Design should never be an afterthought!





Why APS Networks?

Security by Design

Our switches are designed based on the security by design principles. We have full control of our hardware supply chains and have Software Bill of Materials (SBoMs) in place for all software used. Further security features all for use of our products in Critical National Infrastructure (CNI).

Programmability with P4

The innovative technology of the Intel Tofino chipset offers unlimited open networking possibilities by the use of P4 programming language, featuring in-band telemetry and mega scale data center switching. P4 is easy to access, it enables hardware offloading of protocols, arbitrary tagging of packets, and controlling behavior based on individual data pattern matches. The switch has a non-blocking switching capacity of 2.0 Tb/s and is capable of complex protocol processing at wire speed.

Innovative Designs

Our technologies provide the ultimate, stable and supported platform for open network innovation. And our dedicated hardware solutions are built around enabling the latest open technologies to serve vertical industry needs. Open technology enables hardware and software diversity: reducing risk and lock-in to tardy vendor roadmaps.

Made in Europe

Our switches are produced in Europe, as the final manufacturing will be done in Belgium, and most of the components are provided by European suppliers. The printed circuit boards (PCBs) come from Austria and most of the design is done in The Netherlands.

We Deliver!

Modularity

All our new models can be upgraded with a daughter board, supporting a full range of Precision Timing Protocol (PTP) profiles. For the CPU you have the choice of AC or DC power supplies with front to back (port to power) and back to front (power to port) airflow. The PSUs are of Titanium-grade, to provide the highest possible power efficiency levels.

PTP Timing & Synchronization

Our advanced programmable switches are the first to deploy the Tofino chipset with a time synchronization function, which is an essential capacity in the field of telecommunications as well as in media and entertainment. This feature enables

Efficient Power Consumption

The switches are equipped with low-consumption CPUs and energy-efficient PSUs and Fans. The intelligent automatic control system recognizes and manages the operating mode to reduce the power consumption to an optimized minimum, in particular when not in use.

Certification/Traceability

APS Networks and its design partners have invested in simulation tools to augment our capabilities and our engineers have a high level of expertise in designing products that not only meet but exceed requirements in these areas and most importantly we have a track record of largely passing the first time. That saves time, avoids rework and ultimately cuts costs.

Contact our Design Experts to help you choose your switch: +31 35 689 1989

