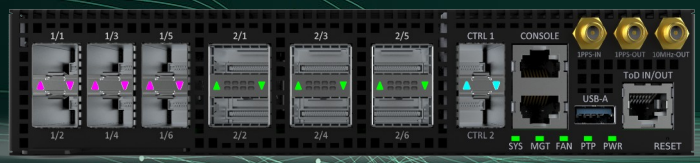
Advanced
Programmable Switches

APS Networks



Forethought, not Afterthought to pass Certifications

Electronic products and systems are required to meet electrical, safety and additional norms and all relevant industry specific certifications. Normally companies design products and then submit them to accredited test labs to put the product through a sequence of measurements to certify the product.

Electronic hardware designers that have marshalled a product through this process, know that when it comes to high-speed, high performance applications, the slightest design flaw can lead to a failure, especially in terms of emitted electromagnetic RF signals (EMI) or the susceptibility to electro-static discharge (ESD).

Creating designs that will pass certifications is not straightforward.

Failures to meet standards can be caused by the routing of tracks in the PCB, the actual material used in the PCB, methods of grounding and decoupling used, the application of RF shielding and physical circuit separations and even the choice of components, the application of coils, and the avoidance of unintended antennas.

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.

Design Brief

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 frond (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
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Contact our Design Experts to help you choose your switch: +31 35 689 1689