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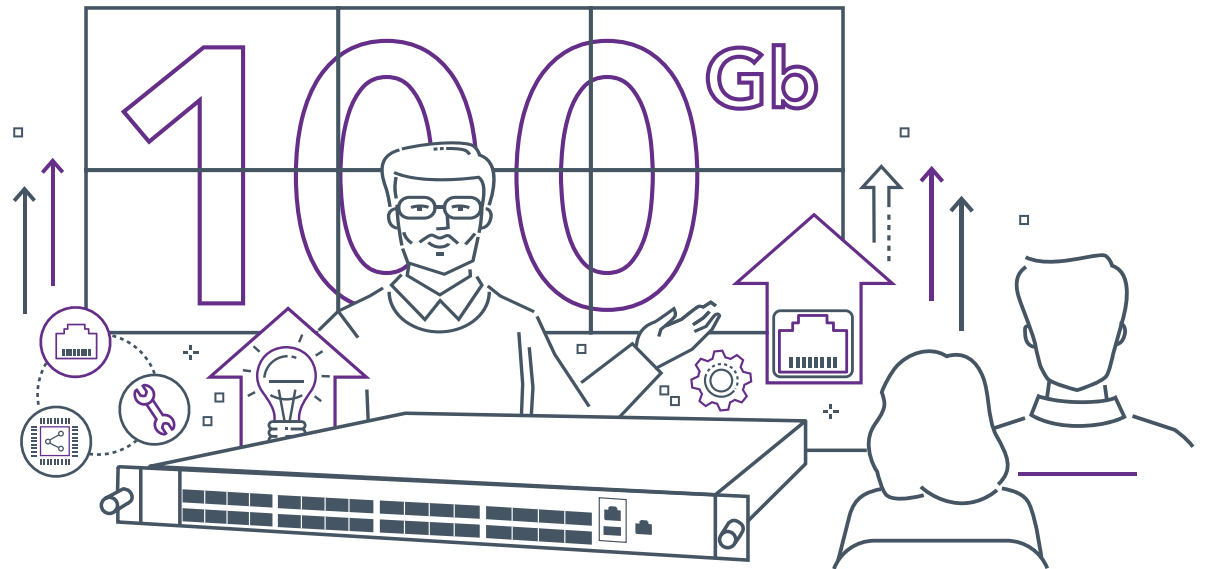
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100Gb Ethernet
that's truly
designed for
ProAV's needs



100Gb Ethernet - high-bandwidth AV over IP made simple



The AV over IP market continues to grow rapidly and as the needs of ProAV installers and users evolve, supporting technology also needs to keep pace. The latest breakthrough is 100Gb Ethernet switch technology that supports high-bandwidth and larger AV installations, but with the simplicity, affordability, flexibility and scalability that ProAV installers and their users now expect. Enter the M4500 series switches from NETGEAR.

SIMPLE
FLEXIBILITY

The success of AV over IP

AV over IP is turning the traditional audio-visual market on its head. This is good news for end users and the growing community of ProAV organizations serving them. Creating sophisticated networks becomes easier, supporting 4K and HDR without compromise, plus far greater flexibility and affordability all-round.

A major catalyst for AV over IP is Software Defined Video over Ethernet (SDVoE): goodbye to inflexible, proprietary, circuit-based switch hardware and compressed video; hello to a world of interoperable solutions that give users far more control. AVoIP has rapidly become established as the way forward for high-speed, superior-quality AV deployments, with minimal latency and design flexibility.

However, as AV over IP usage develops so does the need for hardware that fits today's needs. Beyond the early success of 10Gb products - such as the NETGEAR M4300 Series, deployment of which continues to grow - being able to support higher bandwidths is where the latest challenge lies. And it is not just about being able to support higher bandwidths - 25Gb, 40Gb, even 100Gb - but being able to retain the ease-of-deployment and use that the ProAV market now expects from next-generation AV over IP, and at an affordable price point.

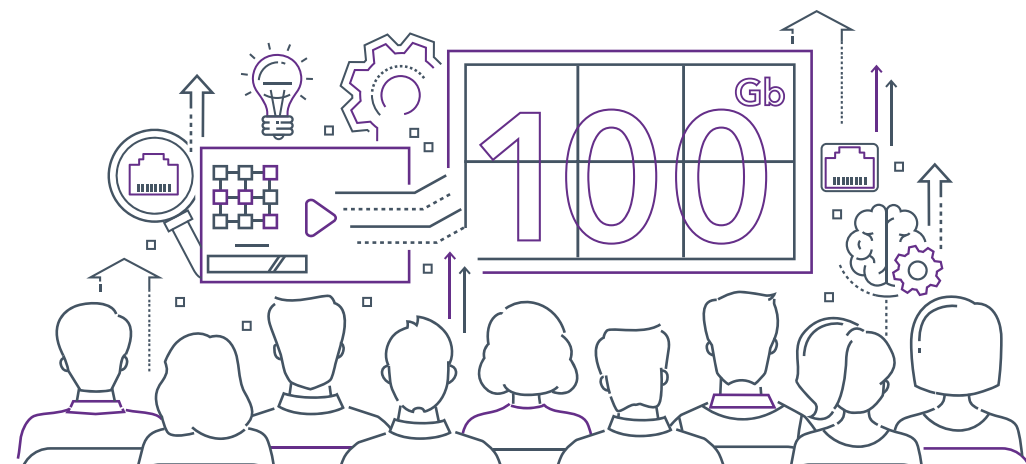


What the ProAV market wants now

Many installers and users who have had positive experiences of AV over IP are now looking to take its use to the next level. As users add more and more encoders and decoders to their solutions, demand grows for faster throughput beyond 10Gb, right up to 100Gb Ethernet.

The problem is that - up until recently - any user wanting to support higher bandwidths with AV over IP found themselves back to the old days of having to choose complex switches designed for big environments. Not only did these come with a high price, they required Layer 3 (Protocol Independent Multicast PIM) routing (particularly for larger AV environments needing multiple switches and support for hundreds of AV end points). That meant more expertise and time and, once set up, more difficult to scale or reconfigure. Understandably, the market found this an unattractive proposition.

So when NETGEAR asked the ProAV market what it wanted next, their feedback was simple: the ease-of-use, flexibility and price point they had experienced with the NETGEAR M4300 series of Ethernet switches, but with 100Gb throughput. The engineers in the NETGEAR labs took on that challenge and came back with an answer: the M4500 Series of Ethernet switches, designed with the ProAV market in mind.



PROAV
DESIGNED

M4500 - 100Gb ProAV made simple

The M4500 is a true game changer in high-bandwidth AV over IP switch design. Whether for a standalone installation or where multiple switches are needed, the modular design ranges from 10Gb to 100Gb. However, what makes the M4500 stand out is that higher-speed Ethernet is made possible without the complexity, inflexibility and cost found in comparable switches.

Designed with the needs of ProAV professionals in mind, another key differentiator is NETGEAR IGMP Plus™, a unique feature developed by NETGEAR. IGMP Plus makes deployment of the IGMP communications multicast protocol across larger AV over IP installations simple, without the burden of time-consuming, complicated Layer 3 PIM routing.

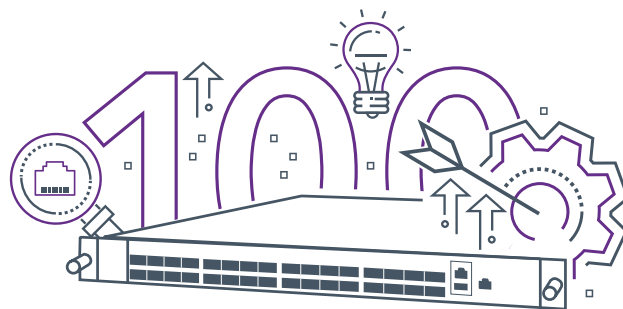
All this means that any ProAV professional can easily and rapidly deploy both higher-bandwidth and larger AV over IP installations. With its preconfigured multicast settings, the M4500 series is ready-to-go for AV over IP out of the box

The best of both worlds - the configurability of an AV matrix switcher with the power and flexibility of Ethernet - means the M4500 series is ideal for supporting hundreds of AV over IP endpoints, but at a much lower price than comparable matrix switchers.

Configurable in a redundant spine-and-leaf architecture, the M4500 Series can be combined with the NETGEAR M4300 Series, with 10Gb ports at the edge. The M4300 has options from 100M-10GBASE-T copper, fibre and PoE.

Naturally, both the M4500 and M4300 series are fully compatible with SDVoE, so they can be combined with other SDVoE-compliant products and brands. These include the new breed of SDVoE encoder cards, which can be plugged direct into the switch chassis. This innovation means that there is no need for additional encoding devices, further reducing complexity and potential points of failure.

Like all NETGEAR switches, the M4500 includes comprehensive security features as standard. Plus, a next-business-day replacement is available in the unlikely event of a hardware failure.



Meet the dedicated 24/7 Pro AV Engineering Support Team

The fast-growing AV over IP market has its own unique challenges. To help make the journey as simple as possible for ProAV installers and end users, NETGEAR has introduced a dedicated team of engineers, focused solely on this market, available 24/7 across North America, Europe and Asia Pacific. Whether providing free network design services, installation support or trouble-shooting, the ProAV Engineering Services team of experts are committed to providing a rapid, expert response.

Contact us: ProAVDesign@netgear.com



Here's what ProAV professionals want:

- Hassle-free installation and configuration
- High-performing solutions that just work
- Flexibility and scalability
- Products that fit the budget, designed for ProAV



And here's what they don't want:

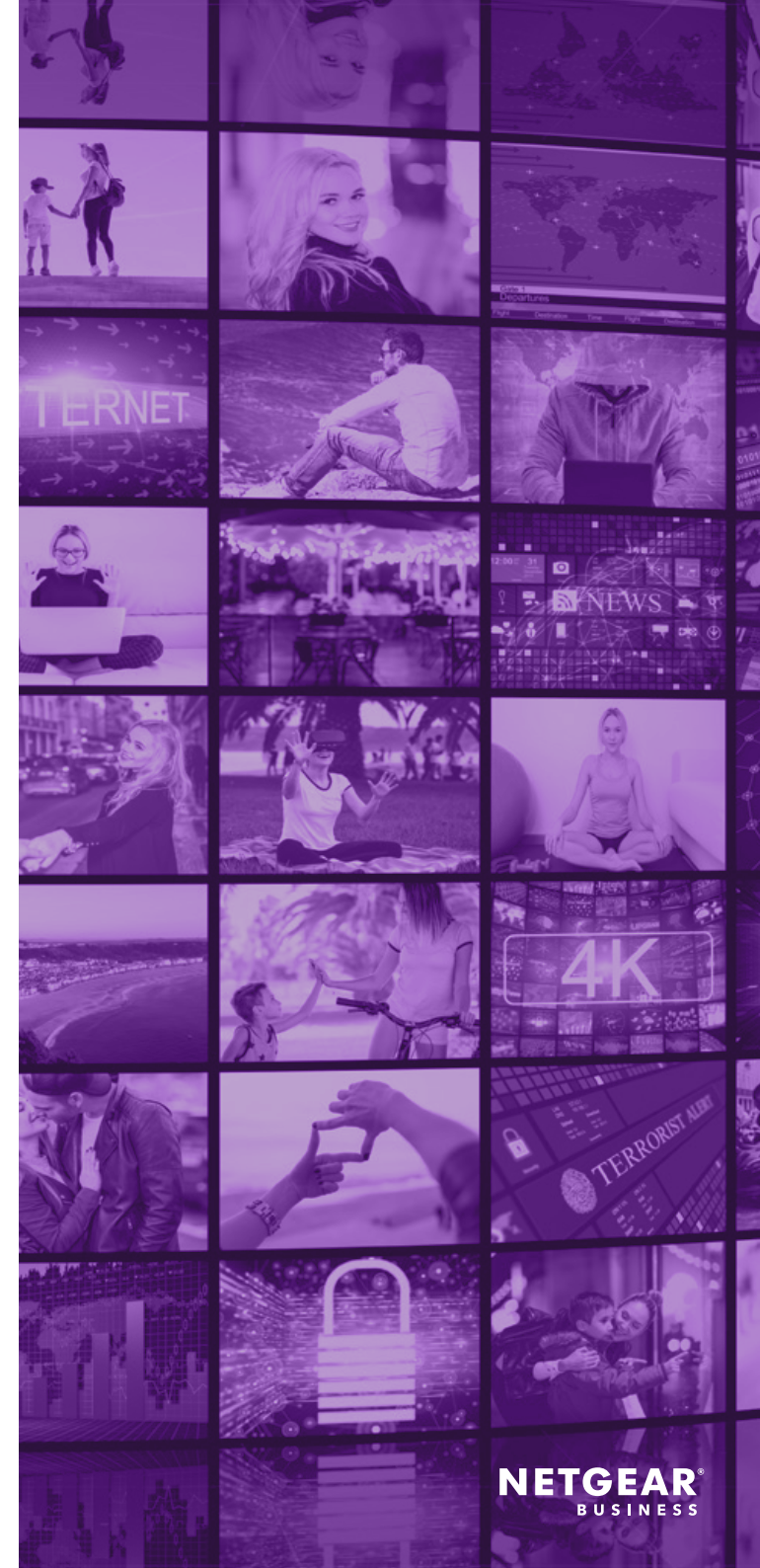
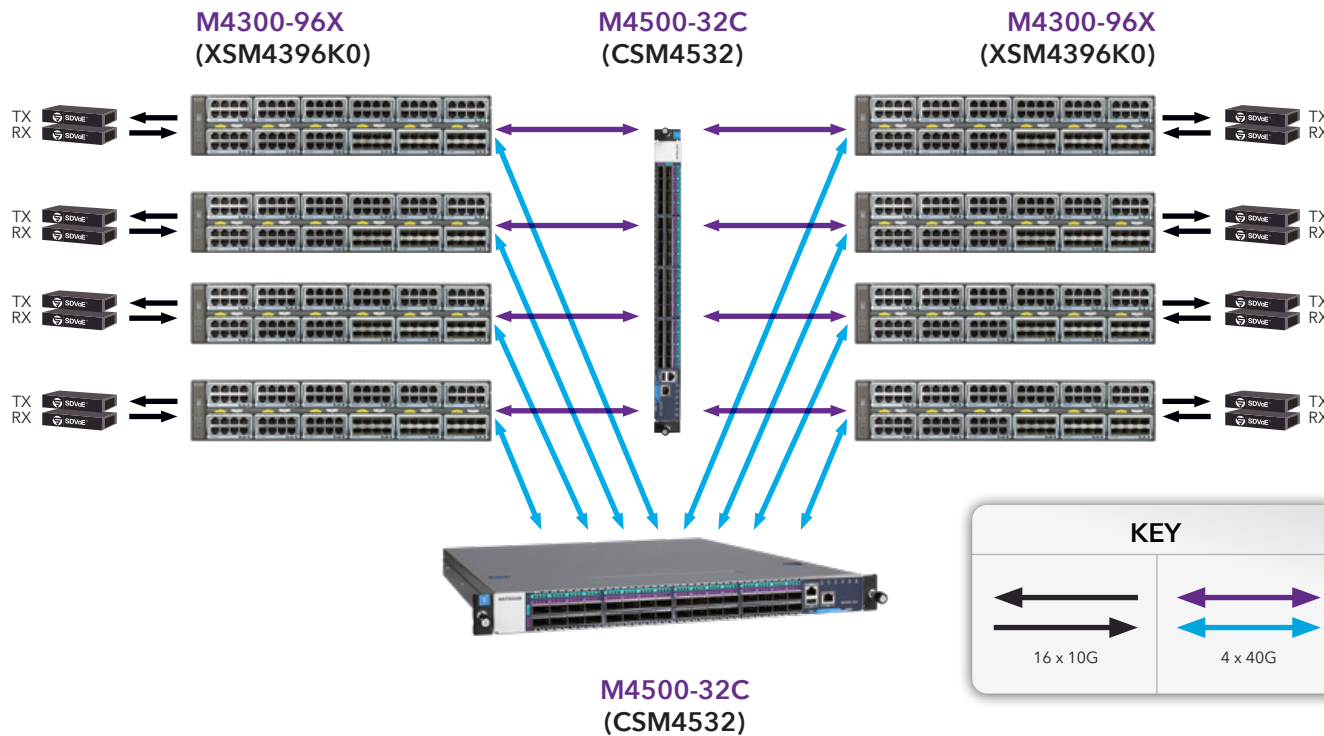
- To have to be network technology experts
- Products that are complicated to set-up
- Paying for unwanted complexity
- Systems that are not designed for AV



24/7
SUPPORT

Example application 128 x 128 @10G

Encoders (TX) and Decoders (RX) on same switches. | Redundant core (spine) installation



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NETGEAR – serving ProAV professionals

A founding member of the SDVoE Alliance, NETGEAR was the first company to launch a family of switches engineered for true AV over IP, thousands of which been installed worldwide, across both fibre and copper connections.

Building on that foundation, the M4500 series is based on the NETGEAR strategy of creating products that address users' needs without complicated deployment or unnecessary, expensive features. The M4500 series provides high performance, flexibility, scalability and standards-based design. NETGEAR has been one of the world's leading innovators in networking equipment for over 30 years.



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