

TrueNet[®] 1 Gigabit Solution

Dependable networks for successful businesses

1 Gig.



KRONE

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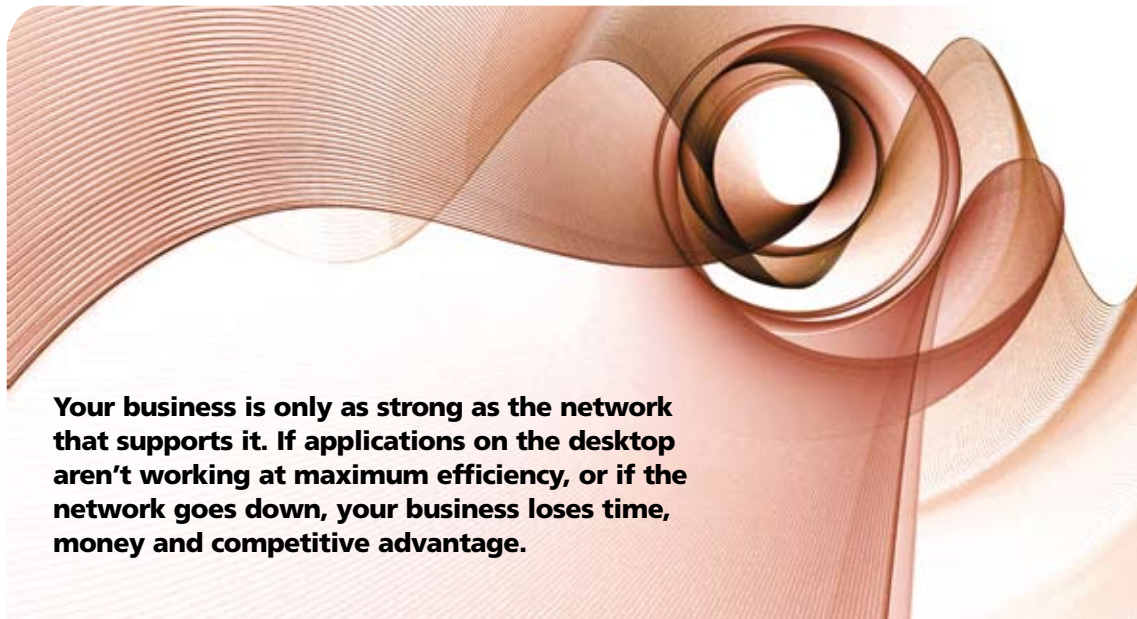
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Create your *ideal network*

with ADC KRONE's 1 Gigabit Ethernet solution



Your business is only as strong as the network that supports it. If applications on the desktop aren't working at maximum efficiency, or if the network goes down, your business loses time, money and competitive advantage.

That's why you need an infrastructure you can rely on 100%. As one of the world's leading connectivity manufacturers offering a complete range of network infrastructure solutions, ADC KRONE can help you build a network that exceeds your business needs and helps keep downtime to an absolute minimum.

A bespoke solution for your business

From PCs to VoIP phones, from the desktop to the backbone, you can rely on ADC KRONE's 1 Gig solution to keep all your mission-critical applications running smoothly and efficiently 24 hours a day, 7 days a week, 365 days a year.

We offer the full range of 1 Gigabit network connectivity technologies, so we can provide you with the solution that's right for your enterprise and your working environment.

We offer every technology for 1 Gigabit network infrastructures:

- Category 5e and Category 6 copper horizontal cabling solutions – both UTP (unshielded twisted pair) and STP (shielded twisted pair)
 - Fibre campus and backbone cabling solutions – both multimode and singlemode
 - TrueNet® Physical Layer Management is our intelligent infrastructure solution and offers:
 - Complete physical layer monitoring
 - Automated change management
 - Real-time asset tracking
 - Security at the physical layer
- For full details of the solution please request a copy of the TrueNet® PLM solution brochure.

Horizontal Cabling

Selecting the right horizontal cabling

One important factor to consider when specifying 1 Gigabit infrastructure is whether your business needs Category 5e or Category 6 in the horizontal. By helping you consider your requirements we can ensure that you select the solution that's best for you.

- Category 5e – supports Gigabit Ethernet up to 100MHz and is an ideal solution for standard structured cabling networks e.g. schools, local government offices and small to medium businesses.
- Category 6 – supports Gigabit Ethernet up to 250MHz, ideal for organisations running on-demand services like VoIP and video conferencing.



Why choose Category 6 rather than Category 5e?

In its simplest form Category 6 results in a much stronger signal at the receiver. That means a higher level of headroom for IT Managers who are looking for a network that can run high performance, latency intolerant applications.

In technical terms this is achieved by Category 6 having a signal to noise ratio that is 16 times greater than Category 5e. This greater signal to noise ratio is due to an increase in mass of copper in the cable, as well as the introduction of pair separators and increased twisting of the pairs. These mechanical changes improve insertion loss and minimise cross talk at both the near end (NEXT) and far end (FEXT).

Meeting and surpassing all the industry standards

When you specify ADC KRONE for your horizontal cabling, each component, link and channel will conform to the very highest industry standards:

- Category 5e up to 100 MHz conforms to EN 50173:2007 Class D or ISO/IEC 11801:2002 Class D or TIA-568-B.2 Category 5e.
- Category 6 up to 250 MHz conforms to EN 50173:2007 Class E or ISO/IEC 11801:2002 Class E or TIA-568-B.2-1 Category 6.

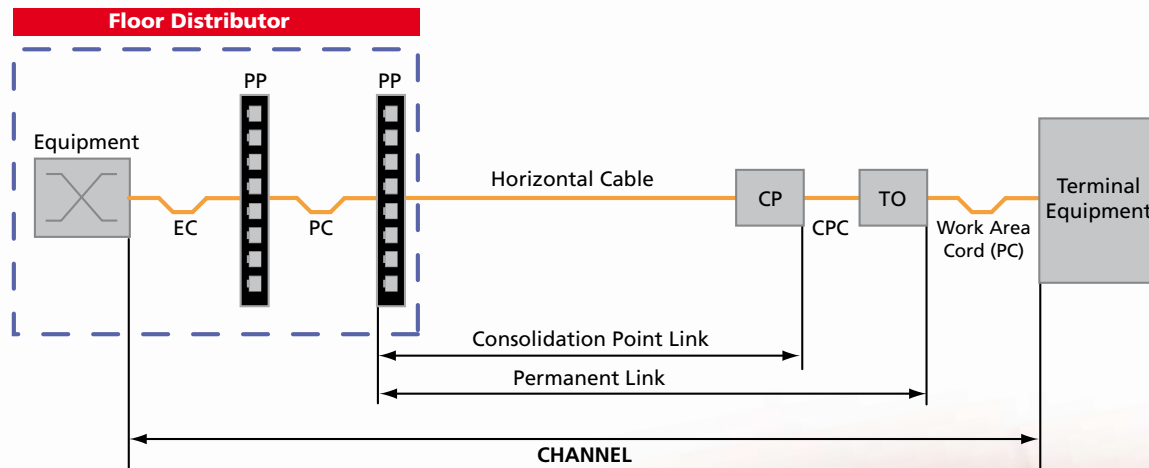
Component compliance

Most structured cabling providers give you channel compliance, whereby they guarantee that, overall, a particular installation will meet the requirements of Category 5e or 6.

However, at ADC KRONE we believe channel compliance is simply not good enough:

- A high performance connectivity product in your network infrastructure could be compensating for a poor one. If that product is ever removed when you alter the network, then the whole channel may no longer be compliant.
- Your network may not support worst case link and channel scenario as defined by the standards.
- You may also face additional problems following any changes to the physical network during MACs (moves, adds & changes).

That's why we advocate and offer products that are compliant to the standards at the component level, so you know every single component within it exceeds the category standards, resulting in a more flexible network.



EC = Equipment Cord
PP = Patch Panel
PC = Patch Cord
CP = Consolidation Point (Optional)
CPC = Consolidation Point Cable (Optional)
TO = Telecommunication Outlet

Installation of a Consolidation Point (CP) is optional but improves flexibility to the work area and minimises network downtime during MACs. A CP gives the ability to configure and re-configure the work area quickly. Only one CP is permitted between Floor Distributor and Telecommunication Outlet (TO).

Campus and Backbone

Once you have decided upon the technology that best meets the needs of your horizontal network, you need to specify a fibre backbone that has the capacity to provide optimum performance now and in the future. At ADC KRONE we can help you select the fibre solution that is right for you.

Rely on us to provide the full end-to-end solution

Although we built our reputation on copper connectivity, at ADC KRONE we also lead the way in fibre optic technologies. That means when you install a copper 1 Gigabit horizontal network, we can also help you optimise the backbone to the network by drawing on our experience of developing fibre solutions.

We are one of the very few manufacturers that can create a complete network infrastructure for you in this way. We are your single point of contact for a complete end-to-end solution.

Superior fibre quality

Our fibre optic products are manufactured to exceed the performance levels demanded by international standards. For example, concentricity of the fibre ensures perfectly circular glass, which means no signal imperfections. Consequently you can be sure there will be no interference or latency on your network, just strong, instantaneous signals you can depend on. In addition, our unique 20 year zero bit error warranty means that you can be sure your network will be 100% reliable for the whole of its lifetime.

We offer a comprehensive range of fibre solutions and products, and we can work with you to decide which is right for your business:

Singlemode or Multimode

Singlemode solutions (OS1)

- Ideal for distances up to 10km
- High precision connectivity for effective laser launch conditions

Multimode (OM1, OM2 and OM3)

Cost effective solutions that can be driven by low cost lasers (VCSEL) or LED's.

- OM1 supports 1 Gigabit up to 330m and is the least bend sensitive.
- OM2 supports 1 Gigabit up to 550m – a distance that represents >97% of backbone link lengths.
- OM3 supports both 1 Gigabit to 900m and 10 Gigabit to 300m.

ADC KRONE's TrueNet® fibre products are designed for reliability, scalability and the thermal requirements of today's mission critical networks.

With our commitment to technical leadership, innovative design and quality you can rely on a TrueNet® fibre solution to surpass the toughest requirements of both present and future networks



A completely future-proof solution

ADC KRONE's TrueNet® Blown Fibre solution is a simple way of ensuring that as demand on your network increases, your infrastructure can evolve seamlessly with it. Fibres are simply deployed along pre-installed tubes using compressed air. You can upgrade your fibre network as your needs change, without facing the expenditure, inconvenience or extensive planning involved with installing new infrastructure.

The benefits to your business are compelling:

- *Ease of installation – no need to dig up ground and lay cable*
- *Reduced cost – you avoid any of the costs (and disruption) of subsequent upgrades*
- *Future proofing – you can upgrade to more powerful network as your needs evolve*
- *Blown fibre is unique in the fact that the fibre can be recovered and reused*

Expert advice on your backbone

At ADC KRONE we also have the expertise in 10 Gigabit technologies to provide a robust and powerful backbone for your organisation. So whatever the requirements of your users, your backbone will be capable of supporting all of the demands placed upon it.

Of course, your requirements may mean that 1 Gigabit is perfectly sufficient for your backbone. Because we have unrivalled expertise in both 1 Gigabit and 10 Gigabit technologies, we can recommend which solution best suits your needs, so you benefit from a network infrastructure that delivers exactly in line with your organisation's needs.



Network Infrastructures that you and your business can depend on...

Outstanding product quality

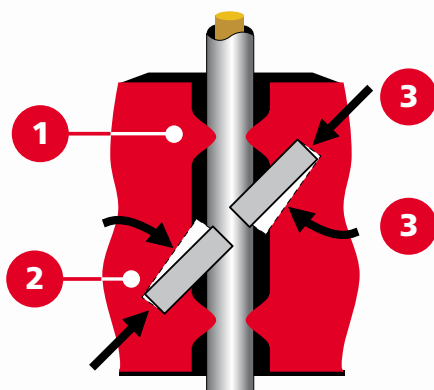
There can be no compromise when it comes to network infrastructures. Every cable, patch panel and connector has to be 100% reliable to ensure the network continues to operate at maximum efficiency.

Thanks to our years of experience in markets across the world, as well as our commitment to innovation, we have developed a portfolio of market-leading products that ensure maximum network performance at all times.

Innovative design that leads the field

Our unique cable management system LSA-PLUS®, as found in ADC KRONE connectors, is just one of the groundbreaking technologies developed at ADC KRONE to enhance the performance of a network. The contact doesn't simply hold the wire securely, it isolates it from vibration and mechanical stress, the unique contact sits at a 45° angle, avoiding the possibility of creating a weak point on the conductor which can compromise traditional cabling solutions.

LSA-PLUS® silver-plated angled contacts are the most secure available, anywhere.



- 1** Insulation clamping ribs hold the wire securely – isolating the contact area from vibration and mechanical stress.
- 2** Silver-plated contact at a 45-degree angle across the wire's axis results in a mechanically strong connection.
- 3** Axial and torsional restoring forces make a solid, gas-tight connection.

Billions of Connections

LSA-PLUS® technology has been used in billions of connections worldwide, and continues to set the pace for others to follow.

- Accepts 26-22 AWG insulated conductors
- Accepts solid or stranded insulated conductors
- Accepts two insulated conductors of the same type (solid or stranded) and size (26-22 AWG)
- Can be re-terminated 200 or more times



ADC KRONE leaves more wire between contact points; providing a more reliable stress resistant connection.



Typical primary wire after being punched into a 110 type IDC; positioning contacts at a 90-degree angle results in a weaker connection, more prone to breakage.

...Independently tested and with an unrivalled warranty

As a world leader in providing global network infrastructures, at ADC KRONE we provide some of the highest quality products available on the market today. Thanks to our superior technology as well as our unrivalled warranty and independent verification, when you choose ADC KRONE you can be assured that your network is designed and built to last.

Truly independent testing

To ensure that our products always meet the very highest standards of quality and performance, our products are regularly tested by independent experts. Third-party assessors perform quality audits at our manufacturing outlets without giving any warning or notification, testing our complete 1 Gigabit portfolio. So whether you specify UTP or STP, Category 5e or Category 6, you know that every single product is guaranteed to perform to the highest levels.

A *unique* Zero Bit Error warranty

Only ADC KRONE offers you a Zero Bit Error warranty, bringing you the reassurance that your network will be completely free of bit errors (as a result of the cabling infrastructure) during the full warranty period of 20 years. Whichever network solution you choose – singlemode or multimode fibre, shielded or unshielded copper – you're automatically guaranteed full data bandwidth from any port to any port 24x7, 365 days a year and are covered with a 20 year warranty underwritten by ADC KRONE when installed by a TrueNet® Integrator (ADC KRONE approved installer).

What does that mean to you? ***Simply that whatever type of network you choose, whatever ADC KRONE products you have, you can depend on them 100%. It's simply fit and forget.***

Why you should choose ADC KRONE

- ▶ We provide a complete range of UTP, STP and fibre connectivity, so instead of forcing a solution upon you, we can create the network that's exactly right for you
- ▶ Our products aren't just innovative, they meet and surpass standards too
- ▶ We have a truly global presence that includes manufacturing plants in all of the major markets throughout the world helping to keep delivery distances down and thereby helping to protect the environment
- ▶ We give an unrivalled warranty to ensure your network keeps on running at maximum efficiency
- ▶ We take a leading role in the industry, so you can rely on our solutions

Enjoy the benefits of choosing a global leader

Decades of expertise

Founded in 1935, ADC is one of the world's leading suppliers of global network infrastructure products and services. In 2004, ADC acquired the KRONE Group, a market leader in copper and fibre-based connectivity. The integration of the two companies means no other provider is better placed to provide you with the full range of networking solutions, wherever your offices and users are based.

Tailored to your requirements

Because we offer every single 1 Gigabit technology, we can ensure that the network infrastructure we provide you with meets your specific needs. We operate in over 100 countries across the globe, so understand and meet the specific requirements of local markets.

Leading the way in the industry

Not only do our products and solutions meet or exceed all the major industry standards, we are actively involved in establishing those standards too. As we have representation on the leading industry organisations you can be sure we have the expertise to always deliver the latest generation products first.

Helping you meet your environmental responsibilities

As environmental concerns become more and more of an issue in the workplace, we can help you meet your responsibilities and help keep your energy usage down. Thanks to our global manufacturing network, wherever your business sites are located we can help keep the delivery path and your carbon footprint to a minimum.

We work with clients to create a more energy-efficient working environment to keep costs down too. By taking environmental concerns into consideration, from the factory to the product and network design, we aim to minimise waste and improve positive factors such as cooling airflow around high density equipment frames.

Insist on the best network for your business

Your network and what you need from it are unique. That's why we will work closely with you to help you install the solution that matches your business needs, whilst also taking into account the requirements of your local environment.

Make sure your business can rely on your network today, tomorrow and beyond – contact ADC KRONE for a discussion with a local representative.



TrueNet® 1 Gigabit Ethernet



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