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Bridge the copper and fibre gap in your network, inexpensively

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In some areas of the communications networks, it is costly to upgrade the network active equipment to either newer models with SFP ports for fibre connectivity or PoE type for power to the devices. While many don't want to admit it, there are those dark recesses of your network that still have copper links, the areas you have left alone for decades because the alternative is to rip it all out and replace it. Truth is you can upgrade your existing network to fibre without the expense of "rip and replace". This is the single biggest reason that is holding companies back from switching these areas to fibre.

With the simple deployment of our inexpensive media converters, you can convert even these older areas to fibre. How? With a media converter you change the signal on the network from a copper signal to fibre without making any other changes to the network. Media converters are touted as the link between creating the optical last mile connection within a network. They work at a physical layer on your network, receive data signals from one media and then convert them to another. The process is invisible / seamless to your data and makes the one network "look" exactly like the other without changing the actual nature of the network.

Typically a media converter is a small device with two media dependant interfaces and can be installed anywhere in the network. The type of converter required depends exclusively on the nature of the media that needs to be converted, which means they are available in a host of sizes. Our range of media converters includes Multi-Port and Power over Ethernet types.

CCTV IP networks benefit by utilising cost-effective media converters for perimeter devices linking to the Control Room. When using copper links for connectivity of outdoor cameras to control room, there is high risk of surges into the switches due to lightning strikes. Fiber links is non-conducive thus making it an excellent alternative to copper links and the replacement of expensive switches due to blown ports. It is good structured cabling practice to use fiber connectivity when connecting

The Netshield PoE Media Converters transparently connects copper to fiber while providing Power over Ethernet (PoE) to standards-based PoE and PoE+ compliant devices such as IP cameras, VoIP phones and wireless access points.

While they act at a physical layer on your network, they do not interfere with upper level information on your network. What's more, they are as easy to install as your patch leads – which means you don't need to invest in expensive skills in order to get them up and running.

Importantly the media converter will not change the speed or flow of your network. Instead they rely on the end devices for this and will allow the device with the highest speed act as the common denominator. Remember network speed needs to be homogeneous in order for traffic to flow across the network, without this data will not flow. Which is why the media converter merely relies on the highest common denominator and then facilitates the communication.

Customers who would consider the use of a media converter are those who need to extend the limit or length of a network, require a non-conductive link, require a multi-port copper to fiber link and lastly Power over Ethernet. Bearing in mind that copper can only really extend to 100 meters, fiber is more flexible and allows for much longer ranges. Using Multi Mode fiber, the range is extended to 2km and on Single Mode fiber, the range can be extended up to 120km. It is also a good alternative for customers where their ports are copper but devices are all fibre, as well as for companies undecided about the future of their network and need a quick fix / inexpensive solution to help their network act like a fibre network.

Added to our 2018 range of media converters, there is the option of One to One Managed FE/GE Fiber Media Converters whereby the 10/100M or 10/100/1000M IEEE802.3ah OAM manageable ethernet fiber media converter can supervise the real time situation of the remote manageable fiber media converter and set the functions. With this system, the response speed of the operator is quickened, the daily maintenance and network expenditure of the operators are reduced, and the serving quality of them is enhanced.

Also new for 2018 is the bi-directional media converter range which requires only a single strand of fibre to send/receive by transmitting on both 1310nm and 1550nm wavelengths.

Media converters are an excellent means to bridge the fibre gap for your business without you having to make costly decisions about what to do with your copper based LAN.

For more information on Media Converters or to check if there is an alternative solution for your business contact Netshield South Africa on 086 111 4428.