10 Gigabit Application with Lux's Category 6A Shielded Solution

Customer

The Data Center of Hong Kong Polytechnic University

Country

Hong Kong

About the customer

The Hong Kong Polytechnic University (PolyU), is a public research university located in Hung Hom, Hong Kong. It is the first institution to provide technical education in Hong Kong. PolyU consists of 8 faculties and schools, offering programs covering applied science, business, construction, environment, engineering, social science, health, humanities, design, hotel, and tourism management. The university offers over 160 taught programs for more than 25,800 students every year. It is the largest public tertiary institution in terms of the number of students.

Lux Communications supplied around 6 500 nodes of CAT.6A FTP Solution and around 10 000 OM 4 ports for The Data Center of PolyU.

Why shielded solution?

When constructing a cabling system, qualities are as important as protecting the signal. As the signal travels through the cable, it is subjected to various forms of degradation, from crosstalk to radiation. Manufacturers have designed a wealth of products intended to provide safe passage with minimal interference, which is shielded twisted pair copper cable.

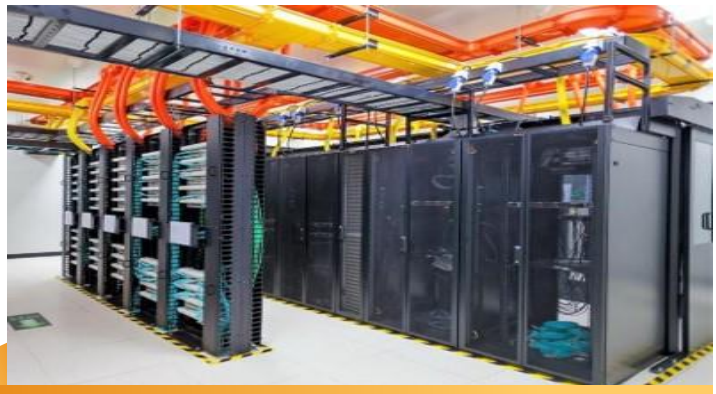
In recent years, the deployment of CAT.6A shielded solution has been increasing significantly for high-speed applications and it has become the most performing data infrastructure Twisted pair cabling consists of two conductors of a single circuit twisted together to help reduce electromagnetic interference (noise).

For more information, visit http://www.lux-comms.com/

Lux's shielded solutions

LUX provides superior quality Cat.6A shielded solution, which guarantees an excellent 10-gigabit application with utmost reliability and stability. Moreover, this option makes it possible to anticipate future trends like the one speculated by the Higher Speed Study Group of the IEEE (40G or 100G over twisted pair).

Cat.6A doubles data transmission bandwidth, from 250 to 500 MHz; decreases the chance of crosstalk interference and provides superior reliability and transmission speeds through greater lengths of cable. Unlike most Cat.6 cables, CAT.6A cables are also often shielded, making them ideal for industrial use where additional interference may be a concern.



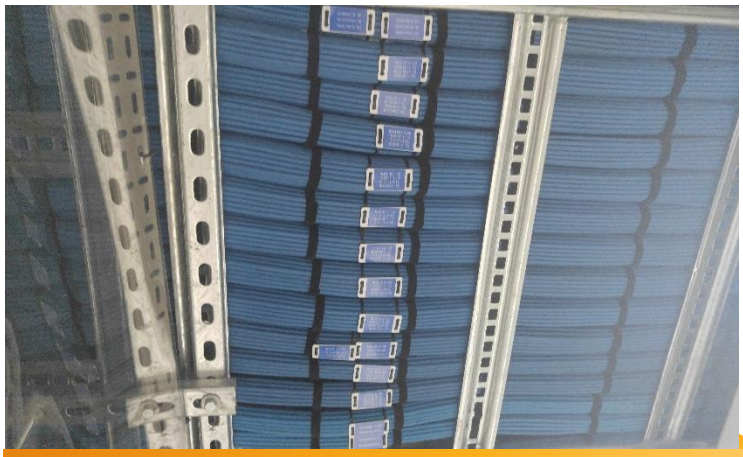
6 500 nodes of CAT.6A FTP Solution and around 10 000 OM 4 ports for The Data Center of PolyU.

Advantages of U/FTP over F/UTP

BETTER PERFORMANCE – When installed correctly, the U/FTP cables provide superior crosstalk and EMI performance. Crosstalk is when the signal in one twisted pair interferes with the signal in another twisted pair.

EASE OF TERMINATION AND INSTALLATION – With the looser twist rate and without the cross divider, termination of the cables is simpler making installation of the CAT6A U/FTP cables easier.

MORE FLEXIBLE AND EASIER TO ROUTE – Without the cross divider, the cable diameter can be smaller in the CAT6A U/FTP cables. Thinner cables are more flexible and easier to route. Thinner cables also allow for better airflow which could help save energy. The cables are flexible and light for installation and routing.



Thinner cables are more flexible and easier to route.

Why cat6a but not cat6?

CAT.6A cable is an improved version of the CAT.6 cabling and offers better performance. CAT.6 cables are rated at 1Gbps while CAT.6A cables can achieve up to 10Gbps. It is backward compatible with the CAT.6 cables.

CAT.6A cables are also stricter when it comes to shielding and protection against alien crosstalk. Crosstalk occurs when the signal from one cable leaks into another. This can distort the signal through the introduction of noise and force the network devices to work at a slower speed. Cat.6A shielded cable can prevent this because it operates at 500Mhz; twice that of the 250Mhz operation.

Lux Communications Limited

Unit 1010, 10/F, Global Gateway Tower,
63 Wing Hong Street,
Cheung Sha Wan, Kowloon, HK

+852 2808 1777
www.lux comms.com

LUX COMMUNICATIONS
Let's Get Connected

For more information, visit http://www.lux-comms.com/