

YOFC PASSIVE OPTICAL NETWORK

PRODUCTS HELP TO START THE ERA OF ALL-OPTICAL NETWORKS IN VARIOUS CAMPUSES

Along with the rapid development of 5G technology, China's all-optical network technologies have currently taken the lead in the world, indicating that China will enter an era of "Great Intelligence" faster than other countries. The arrival of "Great Intelligence" era at an increased speed predicts that network connections will go everywhere, just as the air. Optical fibres will cover every room, machine, and desktop in various campuses, including campuses for education, public security and safe city hotel, government, transportation, factory, intelligent building, and commercial complex, etc., which are also the important application scenarios for the all-optical networks.

With the support of the Passive Optical LAN (POL) technology, YOFC has launched the POL solution that supports multi-service, simple architecture, easy evolution, and high reliability through just one optical fibre. This solution delivers a full series of passive optical network products for end-to-end ubiquitous connections in the campuses, mainly including campus-specific optical cables, optical distribution interconnection products, cabling products for data centers, and fibre perimeter monitoring systems.

01 SMALL-DIAMETER AND MULTI-CORE CAMPUS-SPECIFIC OPTICAL CABLES

The full series of campus-specific outdoor optical cables, such as outdoor armored optical cables, flame-retardant optical cables, bio-protective optical cables, optical cables for rainwater pipelines, slotted shallow-buried optical cables, and air-blown micro cables, are applicable to a variety of complex application scenarios such as overhead, direct burial, and pipelines. Featuring small diameter, multiple cores and small size, these cables can improve the utilization of wiring space by 15% compared with the conventional optical cables.



Full-scenario indoor optical cables, such as bow-type optical drop cables, micro bundle optical cables, indoor armored optical cables, and invisible optical cables, also have the advantages of small diameter, multiple cores and small size. In addition, they feature simple structure, light weight, and other advantages of bending resistance, flame retardant and mildew resistance for easy layout and simple operation.

HDMI (USB3.0) AOC optical cable is a specialty optical cable that integrally combines optical fibres and copper transmission media, which can transmit 4K/8K and VR signals at low latency without loss within a distance of 150 meters. It is designed with YOFC proprietary chips for the connectors at both ends to convert photoelectric signal at low power consumption and high reliability, and can be widely used in broadcast and television centers, video conferencing, intelligent manufacturing, and robot vision, to greatly improve the perception experience of users.

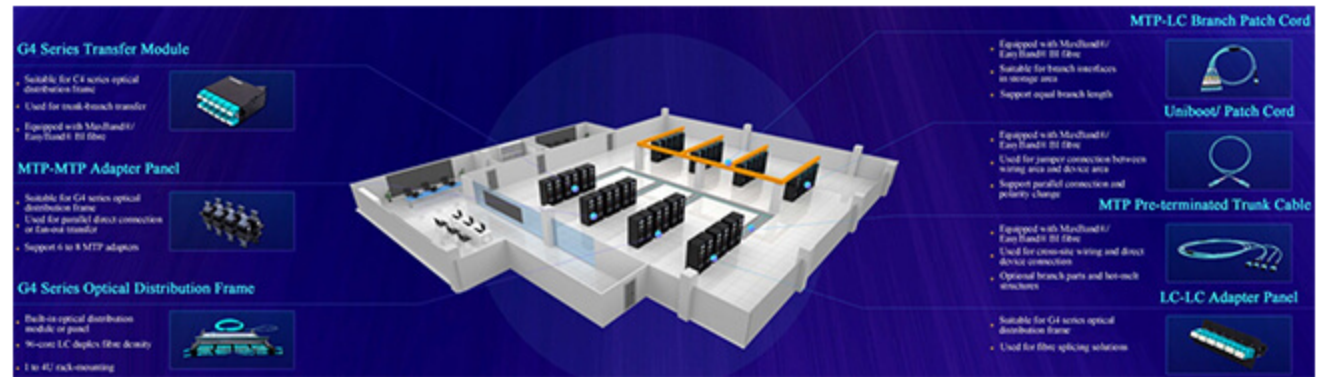
02 INDIVIDUALIZED AND MODULAR OPTICAL DISTRIBUTION INTERCONNECTION PRODUCTS

As an important node device in an all-optical network, optical distribution interconnection products carry multiple scenarios and services in the campuses on the same network, to achieve reasonable optical cable layout, routing management, and service distribution in the network. So far, a full series of optical distribution interconnection products are available, including optical distribution frames (ODF), optical cross connecting cabinet (FDT), fibre optic splice closures, optical splitters, optical fibre distribution boxes, and information panels from the central equipment room to all service nodes. They can be designed fast and delivered at one stop to meet differentiated requirements of different customers and scenarios. They are manufactured with high-strength composite materials to achieve high mechanical strength, which can adapt to all-weather deployment and operation environment. They adopt a humanized, standardized and modular design, and are reasonably arranged to facilitate construction and installation.



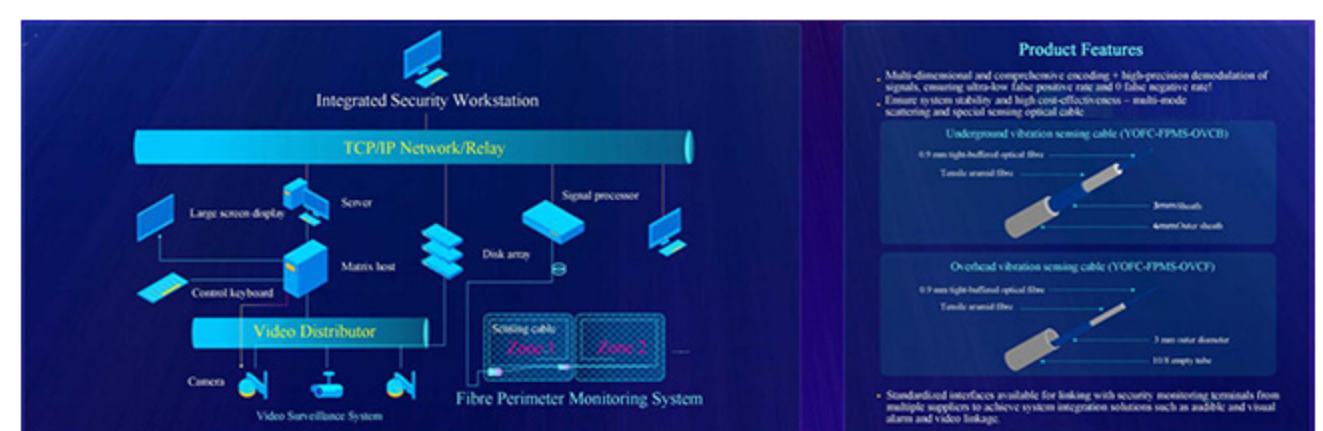
03 ULTRA-WIDE, LARGE-CAPACITY, AND HIGHLY RELIABLE WIRING PRODUCTS FOR DATA CENTERS

The data center, as the network hub in the campus, needs to collect and analyze a huge amount of data from various service scenarios and management platforms in real time. YOFC has developed a full series of wiring products for data centers, including bending insensitive multi-mode fibres, optical distribution frames, modules, panels, trunk cables and patch cords, which feature large capacity, high reliability, as well as convenient installation, expansion and upgrade. In particular, we have developed the world's leading and only Chinese-produced OM4 and OM5 multi-mode fibres, which are compatible with the original multi-mode products in the data centers and support the smooth transition of the network to 100 Gbp/s or 400 Gbit/s systems in the data centers.



04 EFFICIENT AND SAFE FIBRE PERIMETER MONITORING SYSTEMS

The fibre perimeter monitoring system is the outcome of YOFC's deeper research and development of the characteristics of optical fibres. Based on the multi-mode scattering characteristics of specially optical fibres, it combines distributed fibre sensing systems, and implements the functions for multi-dimensional signal encoding and high-precision demodulation to improve the timeliness and accuracy of security monitoring. With standardized interfaces, this system can be linked with the cameras and video surveillance systems from multiple suppliers to integrally incorporate the security management throughout a campus, which achieves truly all-round monitoring and greatly reduces the workload of security personnel.



Light exist ubiquitously, so does connection. The all-optical network is now entering the fifth generation of Gigabit ultra-wide era represented by the 10 Gbit/s PON technologies. Adhering to mission of "Smart Link Better Life", YOFC will continue to broadly exchange and cooperate with the upstream and downstream industry chains, helping to start the era of all-optical networks for the Internet of Everything (IoE) in the campuses.