CTS Delivers World First 10G NBase-T Fiber CPE Switch for FTTH Deployment

Industry	**Country**	**Customer**	**Solution**
Network Operator	Sweden	Affärsverken	10G Fiber CPE Switch

Background

Affärsverken is a utility company based in Karlskrona, Sweden. In mid-1990, Affärsverken began to offer their customers fiber-optic network in the area. Since then, it has always dedicated in providing the top-notch broadband service to its users. In order to fulfill its goal to build a sustainable and stable network infrastructure that support Open Access Network. Affärsverken has been working with us since 2011 and it is mainly two products that have been in focus and that is HES-3109 and HES-3106. CTS has been proven a reliable developer and supplier of P2P Fiber solution. Affärsverken started the initiative to provide 10G to private customers in 2019 and will install several thousand 10G connections during 2020/2021. With over 20 years of expertise in P2P fiber network solution, CTS developed and delivered the world first 10G Nbase-T Point to Point fiber CPE switch.

Challenges

The bandwidth requirement from private internet users have increased dramatically as the applications for entertainment or home office such as video streaming and video conferencing taken up more and more internet bandwidth. Affärsverken always looks for sustainable and future proof solution that can support the ever growing demand for internet capacity. As most of the FTTH installation in Sweden already equipped with 1G fiber uplink, Affärsverken wanted to take the next step with 10G by the end of 2019. However, this operator wanted more than a fiber CPE with 10G uplink…

Solutions and Benefits

With higher bandwidth and processing capability, HES-5106SFP+ fulfills the needs of next stage FTTH deployment. HES-5106SFP+ is equipped with one multigig LAN port supporting 1G, 2.5G, 5G, and 10G. This gives end users flexible options when upgrading their online devices such as Wi-Fi AP. Four additional 10/100/1000 LAN ports also allow flexible installation scenarios with IPTV set-up boxes, Wi-Fi APs or computers.

HES-5106SFP+ supports functions that enable Open Access Network, including TR-069, 802.1q Tag VLAN, 802.1q QoS, and DHCP snooping etc. As IPTV service in Sweden uses multicast, functions such as IGMP snooping, IGMP fast leave, IGMP filtering allows the operator to deliver quality IPTV services.

The ability to provide remote network management is very crucial for the operator in order to deliver stable internet service 24/7, these functions include DHCP auto-provisioning, power down trap, dual image, CLI configuration etc. Since the SFP+ may generate significant heat when in full capacity, SFF-8472 Diagnostic Monitor Interface is equipped

in HES-5106SFP+ so operator can read and monitor SFP status such as temperature, speed, and voltage for remote diagnosis or troubleshooting purposes.

HES-5106SFP+ can be installed with Fiber Cable Tray (HES-FCT-S), which allows backward compatibility if operators want to upgrade their CTS product HES-3106 or HES-3109S already installed in the network.

CTS Products

HES-5106SFP+ | 6-Port 10G NBase-T Management CPE Switch with Fiber Uplink Port

About Connection Technology Systems

CTS was founded in 1998 and has been developing products and solutions in FTTX for more than 20 years. We design hardware and software with in-house R&D team, therefore enables us to adapt the applications and distinguishing features for different region. CTS is building the network with our local partners to achieve their goal and open up the great opportunity for better tomorrow. CTS, Innovation to your needs.