



Reliable CCTV Surveillance Network in Taoyuan Metro

TAIWAN – Taoyuan Metro (Airport MRT)

Case Introduction



Photo Source: Taoyuan Metro Corporation

Taoyuan Metro, opened to the public on 2017, offers a rapid and reliable transportation for local commuters and travelers to travel between Taipei city, New Taipei, Taoyuan Airport and Taoyuan city. With providing pleasant on-board experiences to passengers in mind, Taoyuan metro has continuously searched for advanced technologies to provide connected services on board such as passenger information system, IP surveillance system, internet connections, broadcasting system and so on. However, to implement communication devices on metro trains, Taoyuan Metro faced several challenges:

Requirements & Challenges

- **Harsh Condition.** On-board communication devices must function properly in harsh and extreme conditions such as environment temperature from -40~75°C.
- **Difficult Environment.** When metro trains are operating, communication devices should perform perfectly under high shock and vibration environment.
- **Lack of power supply support.** Communication devices should provide flexibilities for connecting to powered devices for extended networking services such as wireless access points, surveillance cameras, and telephony services.
- **Build a future-proof network.** Communication devices should integrate or migrate to all IP infrastructures easily and flexibly so as to provide modernized and efficient services in this fast-paced digital world.

Solutions and Benefits

To overcome the aforementioned challenges and provide right solutions for Taoyuan Metro, CTC Union has offered ITP series to help build up stable CCTV surveillance networks that are fully connected and scalable. ITP devices such as ITP-802GTM-8PH24 are compliant with EN50155 standards and use easy-to-install M12 rugged and durable connectors to deliver high network connectivity especially in harsh environments and under difficult conditions. ITP series also provide

About CTC Union

CTC Union Technologies Co. Ltd., founded in 1993, proactively designs and manufactures telecommunications, data communications and industrial networking products for a global market. With technologies based on Ethernet and Optical transmission, CTC Union can effectively meet the requirements of voice and data carriers, enterprises, as well as industrial grade Ethernet users.

Using the latest technologies, CTC Union has stormed into the "Industrial Ethernet" marketplace with a wide range of rugged Ethernet products for public utilities, transportation and power substation deployment. With a heavy focus on reliability, certifications and new standards, this proactive thinking will allow CTC Union to continue developing solutions for today and tomorrow's industrial markets.



models with power over Ethernet (PoE) function that can directly connect to powered devices (PD) without power supply so as to provide various networking applications to passengers. Lastly, ITP series uses IP technology and supports comprehensive management functions that are easy to maintain, expand and even migrate to the next generation technology such as 5G without the needs of replacing the existing devices.

All in all, the benefits of ITP series are various. In this case study, ITP series plays a key role to overcome challenges that Taoyuan Metro faced and helps to build up reliable and satisfactory connected CCTV surveillance services. For the future rollout, CTC Union and Taoyuan Metro will continuously work side-by-side to help connected services on board remain state-of-the-art and easily accessible by passengers.

Topology

