

For Immediate Release

TAIYO YUDEN Commercializes Optical Wireless Communication Modules
High-speed Wireless Communication of 100m Distance and 100 Mbps Data Rate



TOKYO, October 11, 2018—TAIYO YUDEN CO., LTD. has announced today the development of the optical wireless communication module (Part number: SOT-TS100A) and commenced shipping samples. The product is used for communications that require strict security such as communications for security or surveillance cameras, or for communications in areas that are unsuitable for wired communications such as communications between buildings or across roads.

Using our unique wireless communication technique, general-purpose LEDs can achieve a communication distance of 100m and a data rate of 100 Mbps. Since optical wireless communication is immune to crosstalk and interference and carries a low risk of information leakage compared to wireless communication via radio waves, it is suitable for wireless communication that requires stability and strict security such as communications for security or surveillance cameras.

Shipment of samples commenced in September 2018 and mass production will start by the end of the year.

Technology Background

As awareness of crime prevention has been increasing recently, more security and surveillance cameras have been installed. To watch video from such cameras at a remote site, wireless communication via radio waves or wired communication is employed. Wireless communication via radio waves is associated with challenges such as various laws and regulations in each country and delays or interruptions caused by crosstalk owing to rapidly increasing numbers of smartphones and other radio communication devices. On the other hand, wired communication is stable but involves high installation cost since rewiring is required each time security or surveillance cameras are added or relocated.

Against this backdrop, we employed our unique wireless communication technique to develop an optical wireless communication module with general-purpose LEDs capable of high-speed communication over a direct distance of up to 100m at a data rate of 100 Mbps. This product can avoid the effects of crosstalk, a challenge for radio communication, and can easily handle the relocation and addition of communication devices, resulting in a reduction in installation costs.

TAIYO YUDEN will continue to meet market needs and further develop optical wireless communication modules.

■ Application

Communication applications that require strict security such as communications for security or surveillance cameras or in areas that are unsuitable for wired communications such as communications between buildings or across roads

■ Characteristics

Part Number	Dimensions (L x W x H)	Data Rate	Distance	Operating Temperature	Certification
SOT-TS100A	81.6 x 119 x 50.5 mm	Max. 100 Mbps	20–100m	-10 ~ +50°C	CE, FCC, VCCI Class B certified