

# Case Study

First Class Digital Learning

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Manufacturer: ATEN  
Vertical: Education  
Location: Hong Kong

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## About the End Customer

A primary school in Hong Kong that required a major upgrade to its A/V multimedia system.

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## The Challenge

The school required up to 1080p signal transmission across three floors from six different sources (both VGA and HDMI) to one website and 13 displays (both VGA and HDMI) across their campus. The solution would need to extend up to 60 meters across the floors and carry a diverse range of source content.

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## The Solution

HDBaseT technology simplified the solution implementation for the entire project. ATEN VE802 HDBaseT-Lite Extenders transmit stable and high-quality 1080p HDMI over long distances via Cat6a cables. This met the demanding requirements of the campus that included the high-quality transmission of the headmaster's addresses during assembly and other events (camera), school announcements (camera), experiments and science projects (digital overhead projector), and educational movies (DVD player). Plus, the HDBaseT anti-jamming technology eliminates signal interference during video transmissions.

HDBaseT technology was also leveraged to transmit power between the VE802 transmitter and receiver units through Power over HDBaseT, which enables up to 100W to be transmitted over the same single Cat6a cable used for audio visual transmission. This eliminated the need for additional power cables and provided a convenient method to locate displays in places where power outlets might not be available.

By installing Aten's VM1600 16 x16 Modular Matrix Switch, real-time control of multiple A/V sources and multiple input devices and displays was achieved. Video and audio content was easily routed directly to various displays, projectors and/or speakers by pressing front panel pushbuttons.

## Results

Simplicity of installation over single LAN cable minimized cable hassle and delivered high-quality video over long distances.

## About HDBaseT

HDBaseT technology, powered by the Valens chipset, enables all-in-one connectivity between ultra-HD video sources and remote displays through a single 100m/328ft CAT6 cable or fiber, delivering high definition 4k video, audio, USB, Ethernet, control signals and up to 100 watts of power.