

Canare Amplifies Foray to IP Broadcasting

Canare Electric Co. Ltd. is aiming to penetrate IP transmission-related solutions on top of the products it has already introduced for standard digital interface (SDI) transmission.

The target product ranges are storage, software-defined video over Ethernet (SDVoE) and 10/40G cable assembly. At National Association of Broadcasters Show (NAB Show 2019), Canare highlights on solutions related to SDVoE.

What is SDVoE?

SDVoE is a standard interface to control switching, configuration and processing. Because SDVoE network architectures are based on off-the-shelf Ethernet switches, it offers simple video system constructions and substantial cost savings over traditional approaches.

Markets that benefit from SDVoE technology include education, healthcare, enterprise, entertainment, hospitality, retail, houses of worship, government, military, industrial and security.

As audio-video industry shifts to IP-based solutions, SDVoE is becoming an inevitable standard and the SDVoE Alliance, a non-profit industry organization, has already started bringing leading companies to a standardized hardware and software platform.

Member companies are already growing to scale to 40 companies, and Canare is also one of them.

Ultra Compact Form Factor

Canare's foray to IP transmission field has prompted the company to introduce products such as SVDoeE. The company's SVDoeE solution allows 4K A/V real-time transmission over 10Gbit Ethernet and enables control configuration with high interoperability. The solution is one of the industry's first model with 10GbE Tx/Rx on one unit to enable easy system configuration change.

Canare's SVDoeE solution is one of the smallest converter and controller units with its ultra compact form factor. It has both I/O lineup of 10G-SFP+ and 10G-BaseT.



SZ-CU001 controller unit



RJ45 version of SZ-V501TR converter(Tx/Rx)



SFP+ version of SZ-TR6 converter(Tx/Rx)

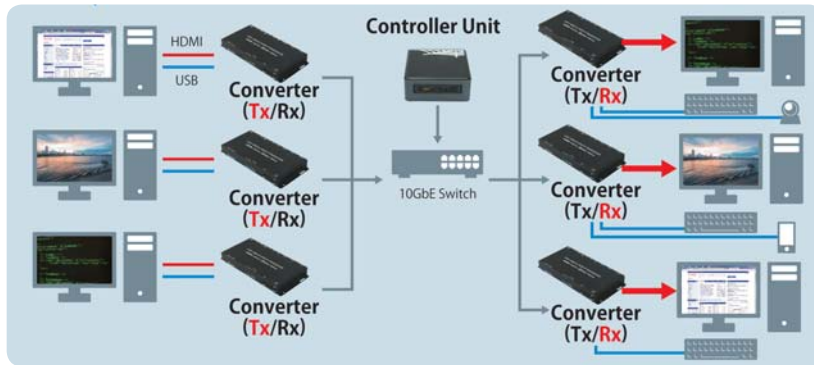
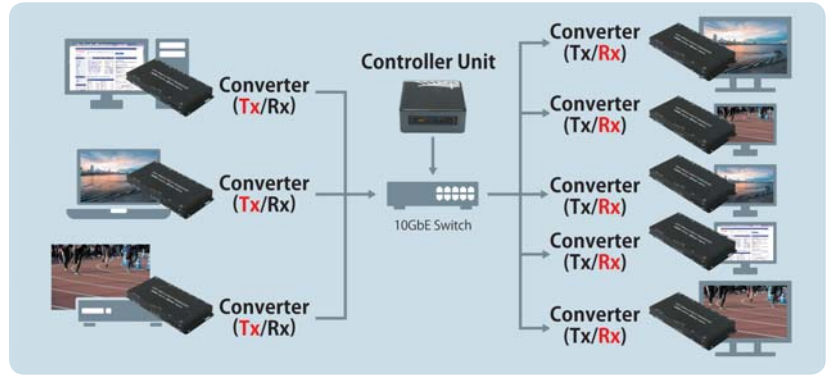
Canare's SDVoE Highlight

- 4K A/V real-time transmission over 10GbE
- Control configuration with high interoperability
- Ultra compact form-factor as industry's smallest converter and controller unit
- Industry's first model with 10GbE Tx/Rx in one unit to enable easy system configuration change
- Both I/O line-up of 10G-SFP+ and 10G-BaseT

• Example 1: Matrix Switches

SDVoE technology replaces the traditional matrix switch with a more flexible, scalable, reliable, and affordable solution. Ethernet ports are bidirectional, hence it is no longer necessary to consider inputs versus outputs with how many ports one needs. Ethernet switches can be stacked and scaled to thousands of ports.

Furthermore, with the massive economies of scale, IT suppliers are expected to deliver more reliable switches at cheaper prices than old A/V manufacturers ever could.

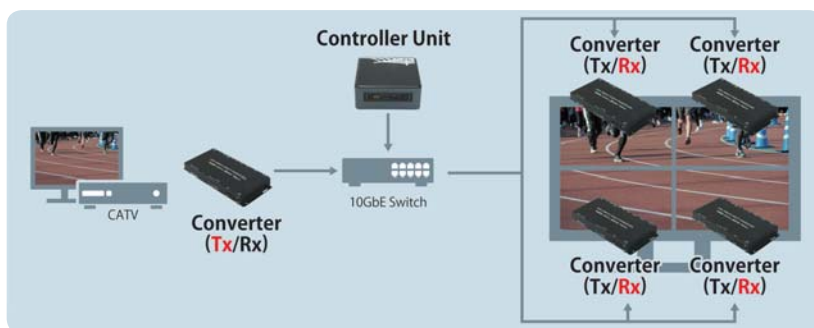
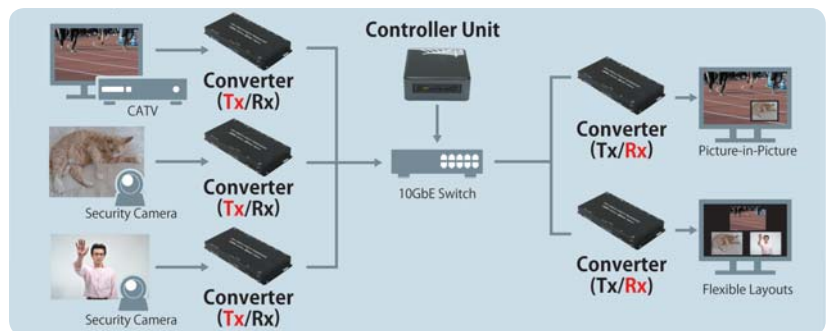


• Example 2: KVM Switches

SDVoE goes beyond simple Human Interface Device (HID) USB switching. SDVoE products that feature USB capability offer full support for USB 2.0 at full 480Mbps bandwidth. This means sophisticated keyboard, video and mouse (KVM) applications can be deployed to workstations using not only keyboard and mouse, but security card readers, fingerprint scanners, web cameras and more. With 10Gbps of network bandwidth, any USB application is easily supported.

• Example 3: Multiviewers Using

Traditional multiview processors require a specialized central video processor with incredible bandwidth capabilities to receive and scale multiple video feeds. This makes them very expensive. The distributed nature of SDVoE allows processing to be spread out across multiple endpoint devices, so no device needs to have expensive special capabilities. The scalability of SDVoE technology means it is easy to build a custom multiviewer with exactly the right number of inputs and outputs, adding transmit and receive (Tx/Rx) one by one.



• Example 4: Video Walls

SDVoE processing engines are capable of powerful video manipulations such as scaling, cropping and stretching. These basic processing blocks can be used to create video walls of arbitrary size and shape. Software tells each receiver its position in an array, and the correct image is displayed on the screen. An added benefit is that SDVoE receivers know how to keep all wall outputs perfectly synchronized.

The result is easy-to-implement video walls with no extra cost on top of switching and distribution system.