

Product Brief

8K / 16K Bi-Directional Optical Video Transmission Device

Overview

The 8K/16K Bi-Directional Optical Video Transmission Device enables real-time transmission of ultra-high-resolution video signals over a single optical fiber using Dense Wavelength Division Multiplexing (DWDM) technology. The system enables long-distance transmission of uncompressed video signals with low latency.

FEATURES

8K / 16K Transmission

- 8K transmission via 4 x 12G-SDI
- 16K video transmission via aggregated 12G-SDI (single optical fiber)
- HD SDI, 3G SDI, GbE, 10GbE and 100GbE

Ultra-low latency transmission

Pathological signal resilience

Integrated optical amplification

- Built-in booster and pre-amplifiers enable stable transmission over long distances or high-loss optical networks.

Optical line protection

System Architecture

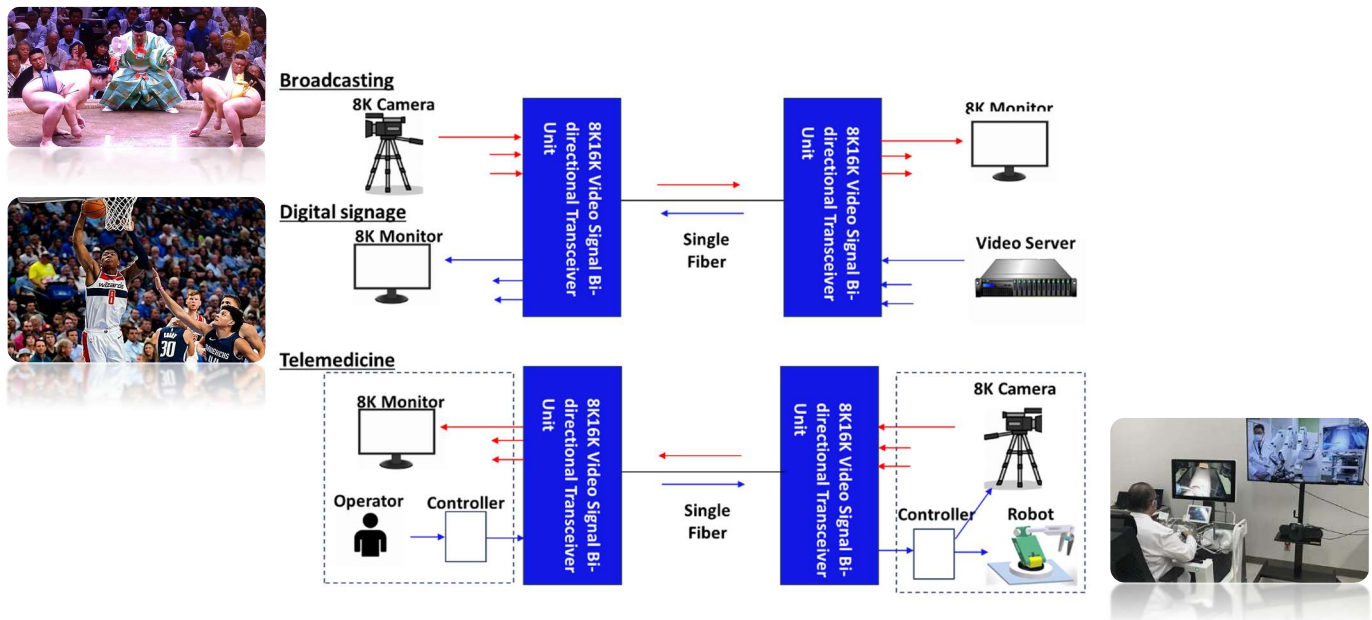
- This all-in-one architecture eliminates internal fiber patching between modules, improving reliability and simplifying system deployment.

SPECIFICATION

System Specification.

Parameters		Specification
Interface	12G SDI Tx	24-Ch max.
	12G SDI Rx	24-Ch max.
	GbE	2-Ch
	10GbE	24-Ch max
Allowable optical fiber loss		30 dB
Optical fiber transmission		SMF, 1-core, Bi-directional
Wavelength		C-band 50 GHz spacing
Transmission distance		40 km
Optical fiber protection		Supported
Power consumption		300 W
Dimensions		430 x 132 x 480 mm

APPLICATIONS



Product Images



(a) Front Panel



(b) Rear Panel

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