

GENESIS™ 10G

4K AVoIP System



HDMI2.0

HDCP2.2

KVM

CEC, IR &
RS232

Video
Wall

PoE

Overview

G10GRTF is the SDVoE Compliant transceiver All-In-One AV over IP solution.

G10GRTF provides highest-quality, uncompressed 4K and zero-frame latency audio/video extension over a standard 10G Copper or Fiber Network Switch with instant switching, Video Wall and Multiview functions.

It can transfer advanced HDMI content such as HDR (high dynamic range), full colour-depth and multichannel HD Bitstream audio. Flexible transceiver design (one box can be set to encoder or decoder) is much convenient in a real installation site and inventory control. Its built-in Secondary Stream supports a high quality, bandwidth configurable H.264/H.265 compression video stream for portable device preview purpose.

Multiple control and data signals can be transmitted along with audio and video signals simultaneously, including bi-directional IR, RS-232, USB KVM, CEC and 1G Ethernet.

Key Features

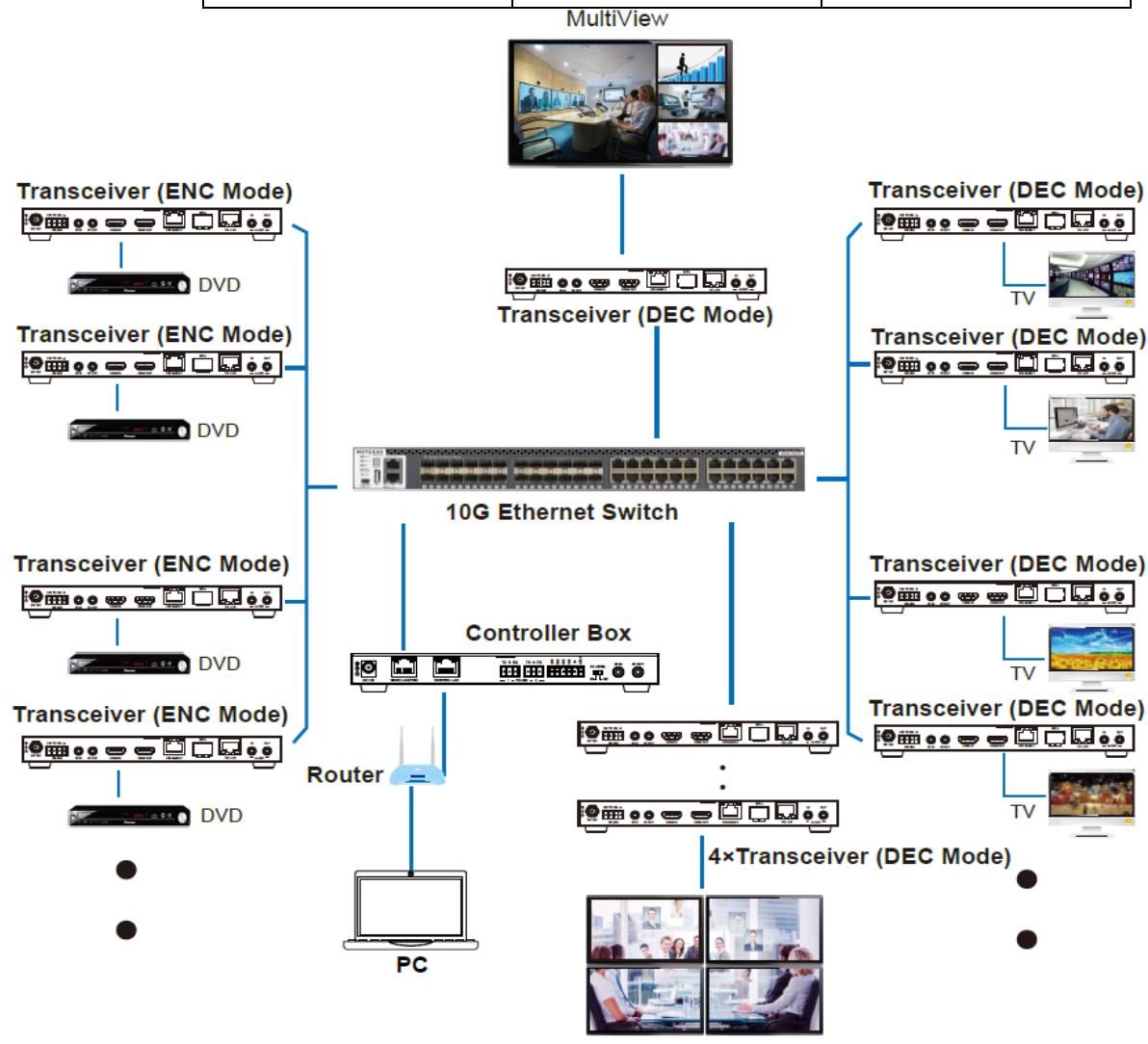
- HDMI 2.0b and HDCP 2.2 compliant
- Support video resolution up to 4K@60Hz 4:4:4, 18Gbps video bandwidth
- Flexible transceiver design (Encoder, Decoder, Copper and Fiber ports within a single box)
- Encoder supports HDMI Loop out
- Support HDR10, Dolby Vision, HLG, 3D as well
- Support full HDMI audio formats, up to Dolby TrueHD, Dolby Atmos and DTS-HD, DTS:X
- Support Zero-Frame latency operating mode
- Support signal extension, seamless switching, Matrix, Video Wall up to 9x9 and Multiview up to 25 windows
- Flexible audio routes control including bidirectional analog audio transmissions between Encoder and Decoder
- Built-in H.264/H.265 Secondary Stream (SS) for preview
- Support Secondary Stream VLAN tagging and parameters configuration
- Support bi-directional IR and RS-232 control signal pass-through
- Support USB2.0 (KVM), CEC routing control
- Support IR, RS-232, TCP/IP, Web GUI control
- Standard POE supported (802.3at PD device)
- 10G managed network switch

Specifications

Video Resolution	Up to 4K@60Hz 4:4:4
Colour Space	RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0
Color Depth	Full Colour-Depth
Video Network Bandwidth	10G
HDMI Audio Formats	LPCM 2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-96/24, DTS-EX DSD, DTS High Res, DTS-HD Master, DTS:X
Power Supply	PoE or DC 12V/2.5A
Transmission Distance	100m (CAT6A/7) / 70m (CAT6)
Warranty	2 years
Operating temperature range	0~40 degrees centigrade
Operating humidity range	20%-90% (no condensation)
Storage temperature range	-20~60 degrees centigrade
Storage humidity range	10%~90%
Control Interface	TCP/IP control network port/RS232

Models

Models	G10GRTF	G10GCTL
Type	Transceiver	Controller



System Diagram