Datasheet

AVBRINX-NSE60-T/R | HDBaseT UHD Network Extender with HDMI, Audio, IR, RS232, KVM





Key features

- Supports Ultra HD resolution up to 4K × 2K @ 60Hz 4:4:4
- Based on HDBaseT 2.0 protocol for uncompressed, zero-latency transmission
- Long-distance transmission: up to 150m over CAT6/7 (4K@60Hz supports 100m)
- Fully compatible with HDMI 2.0, HDMI 1.4, DVI 1.0, and HDCP 2.2
- Integrated USB 2.0 passthrough for remote KVM control
- PoC / PoE optional power supply for simplified installation
- Bi-directional RS-232 serial communication
- Two-way infrared transmission
- Audio embedding and de-embedding for versatile AV integration
- Supports latest high-definition audio formats:
- LPCM 2/5.1/7.1CH, Dolby Digital, DTS, Dolby TrueHD, DTS-HD Master Audio

Product Overview

The Macsys AVBRINX-NSE60-T/R HDBaseT UHD Network Extender is a high-performance solution designed for uncompressed, zero-latency transmission of Ultra HD signals over long distances. Supporting HDBaseT 2.0 technology, it extends HDMI, audio, IR, RS-232, and USB KVM signals using CAT6/7 cabling. With transmission support up to 150 meters and flawless 4K@60Hz 4:4:4 compatibility, this extender ensures premium image quality with no signal degradation.

Engineered for corporate boardrooms, control rooms, training facilities, and mission-critical command centers, the extender provides full USB 2.0 passthrough for KVM control, two-way RS-232, and IR transmission. Its PoC/PoE optional mode eliminates the need for multiple power supplies, while advanced audio embedding/de-embedding functions ensure seamless integration with professional AV systems.

With support for high-definition audio formats including Dolby TrueHD, DTS-HD Master Audio, and multi-channel LPCM, the AVBRINX-NSE60-T/R guarantees an immersive AV experience. Built for flexibility, reliability, and long-distance UHD connectivity, this device sets the benchmark for professional-grade AV signal distribution.

AVBRINX-NSE60-T/R | HDBaseT UHD Network Extender with HDMI, Audio, IR, RS232, KVM

Technical Specification

Feature	Details
Model	AVBRINX-NSE60-T (Transmitter)
Transmission Standard	HDBaseT 2.0
Transmission Medium	CAT6/7 twisted pair cable
Transmission Distance	Up to 150 m (1080p); Up to 100 m (4K@60Hz 4:4:4)
Supported Resolution	Up to 4Kx2K @ 60Hz 4:4:4, backward compatible
Video Input	1 × HDMI Type-A (HDMI IN)
Video Output	1 × HDMI Type-A (HDMI OUT, loop out)
HDBaseT Output	1 × RJ45 (HDBT OUT)
Bandwidth	18 Gbps
HDMI Protocols Supported	HDMI 2.0 / HDMI 1.4 / DVI 1.0 / HDCP 2.2
Audio Input	1 × 3.5mm Analog Jack (AUDIO IN, supports embedding)
USB Port	1 × USB Type-A (USB, Slave, PC connect for KVM)
RS-232 / Debug	1 × 3-pin Phoenix (TX/RX/GND, serial control & diagnostics)
IR IN/OUT	1 × IR IN (3.5mm), 1 × IR OUT (3.5mm), Bi-directional IR control
LED Indicators	PWR, MODE, LINK, HDCP, DEBUG (TX, RX, GND)
Manual Key Button	1 × KEY (function/mode select)
Power Input	1 × DC Barrel Jack (12–24 V DC)
Power Options	PoC / PoE (optional)
Operating Temperature	0 – 50°C
Certifications	CE, ROHS compliance

AVBRINX-NSE60-T/R | HDBaseT UHD Network Extender with HDMI, Audio, IR, RS232, KVM

Feature	Details
Model	AVBRINX-NSE60-T (Transmitter)
Transmission Standard	HDBaseT 2.0
Transmission Medium	CAT6/7 twisted pair cable
Transmission Distance	Up to 150 m (1080p); Up to 100 m (4K@60Hz 4:4:4)
Supported Resolution	Up to 4Kx2K @ 60Hz 4:4:4, backward compatible
Video Output	1 × HDMI Type-A (HDMI OUT)
HDBaseT Input	1 × RJ45 (HDBT IN)
Bandwidth	18 Gbps
HDMI Protocols Supported	HDMI 2.0 / HDMI 1.4 / DVI 1.0 / HDCP 2.2
Audio Output	1 × 3.5mm Analog Jack (AUDIO OUT, supports de-embedding)
USB Ports	2 × USB Type-A (USB 1, USB 2, Host for keyboard/mouse)
RS-232 / Debug	1 × 3-pin Phoenix (TX/RX/GND, serial control & diagnostics)
IR IN/OUT	1 × IR IN (3.5mm), 1 × IR OUT (3.5mm), Bi-directional IR control
LED Indicators	PWR, MODE, LINK, HDCP, DEBUG (TX, RX, GND)
Power Input	1 × DC Barrel Jack (12–24 V DC)
Power Options	PoC / PoE (optional)
Operating Temperature	0 – 50°C
Certifications	CE, RoHS compliance

©2024 Macsys

Macsys reserve rights to introduce modifications without notice. Product images are for illustrative purposes only, the actual product may vary. Warranty policy applies as described on our website.