

Technical Datasheet: Lenkeng LKV223

High-Performance 4K HDMI Extender over Cat6/6A/7

1. Product Overview

The LKV223 is a professional-grade point-to-point extender set consisting of a transmitter (TX) and a receiver (RX). It utilizes advanced processing to deliver uncompressed-like video quality with zero latency over long distances, making it ideal for digital signage, home theaters, and command centers.

2. Key Features

- **Extended Range:** Up to 70m (1080p) or 40m (4K) via single Cat6/6A/7.
- **Local Monitoring:** Integrated HDMI Loop-out on the transmitter.
- **Audio Versatility:** Supports LPCM/DTS-HD/DTS-Audio/Dolby Digital 5.1CH.
- **IR Control:** Bi-directional wideband IR (20KHz–60KHz) for remote source management.
- **Lightning/Surge Protection:** Built-in ESD protection for enhanced reliability.

3. Detailed Specifications

Category	Parameter	Description
Video	HDMI Version	HDMI 1.4
	HDCP Version	HDCP 1.4
	Max Resolution	3840x2160 @ 30Hz
	Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Transmission	Cable Type	Cat6, Cat6A, Cat7
	Max Distance	70 Meters (1080p), 40 Meters (4K)
	Latency	0ms (Real-time)
Interfaces	Transmitter (TX)	1x HDMI In, 1x HDMI Loop-out, 1x RJ45, 1x IR In/Out
	Receiver (RX)	1x HDMI Out, 1x RJ45, 1x 3.5mm L/R Audio, 1x IR In/Out

Category	Parameter	Description
Physical	Housing	Aluminum Alloy Enclosure
	Power Supply	DC 5V/2A
	Operating Temp	-20°C to 60°C

4. Connection Diagram

5. Installation Requirements

- 1. **HDMI Source:** PC, STB, Blue-ray player, or Game Console.
- 2. **Display:** TV, Monitor, or Projector with HDMI input.
- 3. **Cabling:** UTP/STP Cat6/6A/7 following the **IEEE-568B** wiring standard.