Video Extender Over Fiber

4K30 HDMI Video Extender over Fiber with SC Fiber Port, Audio, 1-Way IR, RS-232 Extension, SM 10Km

Model: VEX-H14F-10KSM

PRODUCT OVERVIEW

The **VEX-H14F-10KSM, HDMI Video Extender,** with Fiber Optic consists of a Transmitter and a Receiver unit, allowing you to extend 4K30 HDMI/Audio/IR/RS-232 signals over SC Single-Mode Fiber Optic cabling. It transmits 4K HDMI video up to 10 Km (32,800 feet) through a single SC Duplex Fiber Link Port and via Single-Mode fiber cable in a point-to-point configuration. The Fiber Video Extender supports popular signal resolutions up to 4K at 30Hz with 4:4:4 color sampling and is ideal for the most demanding applications.

Comprising a compact Transmitter and Receiver pair, the HDMI Video Extender with Fiber Optic can be installed in minutes and requires no special programming. Using fiber optic cable offers several advantages over traditional copper-based extension methods, including thinner and lighter cables, immunity to RF and magnetic interference, and much longer extension distances up to 10 Km. It is particularly well-suited for electronically "noisy" environments such as factory shop floors or medical applications.

2-Way Audio with Unique Audio Embedding/De-Embedding Function

The bi-directional audio extension function allows the Extender's Transmitter unit to independently transmit 2-way audio signals to the Receiver unit, and vice versa. The audio embedding/extracting function enables the transmission of audio signals from the Transmitter unit to the Receiver unit. It can embed audio from a 3.5-mm source into an HDMI signal or extract HDMI audio to a 3.5-mm stereo audio output. This feature provides an additional audio transmission channel, which is particularly beneficial for content creators in video post-production or audio broadcasting.

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Economic Solution for Aviation and Marine Applications Supporting 2048 x 2048 Resolution

The HDMI Video Extender with Fiber Optic supports a unique resolution of 2048 x 2048, ideal for air traffic control and marine radar applications. Instead of purchasing an expensive 2048 x 2048 radar display, users can use a standard monitor and place the Fiber Extender between the monitor and the video source to accurately display the 2048 x 2048 resolution.

The Fiber Video Extender, equipped with speaker and microphone audio functions, offers comprehensive management of EDID (Extended Display Identification Data). This ensures that the computer displays the optimal resolution and format without compatibility issues. The serial extension function allows users to control RS-232 devices remotely, including projector, central control system, POS system, AV switcher, etc. A simple OSD menu enables users to configure the baud rate, with options ranging from 1200 to 115200 bps.

Compatible with Windows, Linux, Chrome OS, and macOS, the Extender is perfect for data centers, offices, control rooms, airports, server rooms, and factory applications.

KEY FEATURES

- Allows reliable remote access of a video source via a fiber cable up to 10 km (32,800 feet).
- Supports single-mode duplex OS1 or OS2 (9/125μm) cables with SC Duplex connector.
- HDMI 1.4 video supports most popular resolutions up to 4K@30Hz (4:4:4).
- Supports radar display, 2048x2048@60Hz (4:4:4), and 2Kx2K LCD display for air traffic control.
- HDCP 1.4 compliance ensures uninterrupted video playback.
- Smart audio extension allows embedded audio and audio extraction.
- IR extension from Receiver to Transmitter unit facilitates IR control of AV sources.
- RS232 serial extension with selectable baud rate allows for extensive control applications.
- Immunity to high EMI environments via fiber system.
- Plug-and-play, no driver or software required.
- Supports Windows, Mac, Linux, and Chrome OS.
- Interoperability among HDMI and DisplayPort model of the same product family.
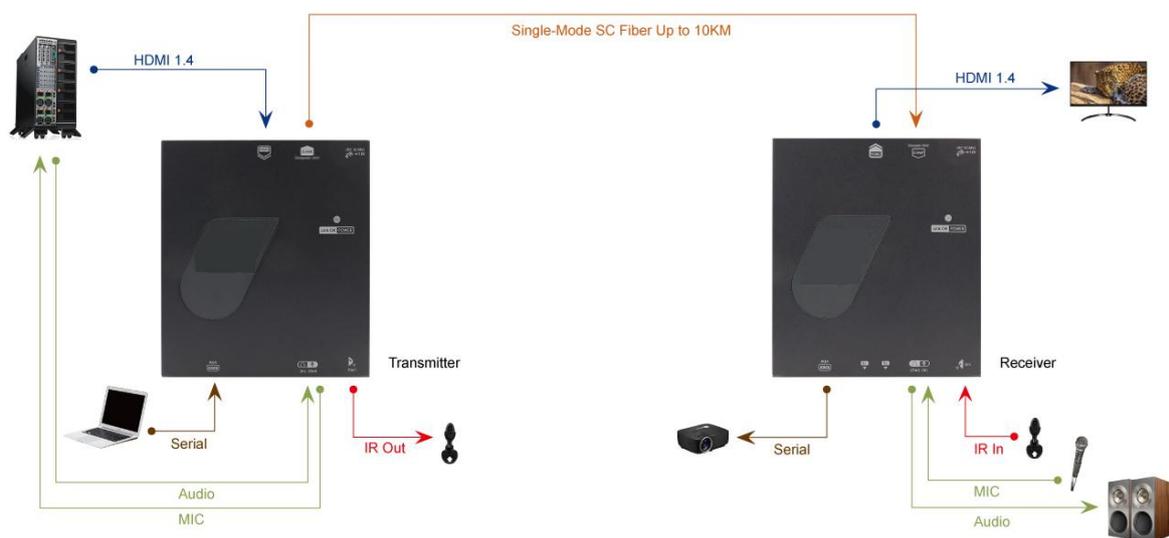- Allows wide power input range DC 12-48V.

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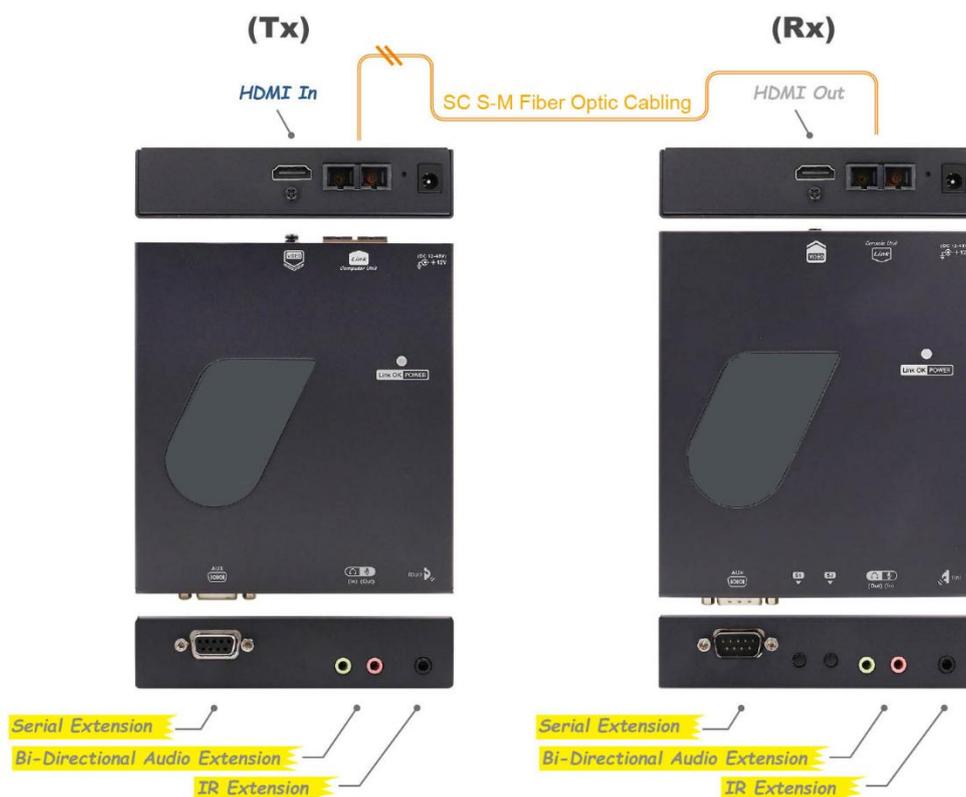
PRODUCT SPECIFICATIONS

VEX-H14F-10KSM	Transmitter	Receiver
Max Resolution	3840x2160@30Hz (4:4:4) 2048x2048@60Hz (4:4:4)	
Video Extension	HDMI 1.4 x 1 (In)	HDMI 1.4 x 1 (Out)
Speaker Extension	3.5mm SPK Jack x 1 (In) (Audio Embed Function)	3.5mm SPK Jack x 1 (Out) (Audio Extract Function)
Microphone Extension	3.5mm MIC Jack x 1 (Out)	3.5mm MIC Jack x 1 (In)
IR Extension	3.5mm IR Jack x 1 (Out)	3.5mm IR Jack x 1 (In)
Serial Extension	DB9 x 1 (RS-232 DCE)	DB9 x 1 (RS-232 DTE)
HDCP Compliance	HDCP 1.4	
Fiber Link Port	1.25Gbps Single-Mode SC Duplex x 1 (Wavelength: 1310nm)	
SC Fiber Cable	Duplex OS1 or OS2 (9/125µm)	
Extension Range	Max 10Km with OS1 or OS2	
LED Indicators	Status x 1	
Push Buttons	Reset x 1	Reset x 1, Function x 2
Power Supply	DC 12V	
Operation Environment	0 ~ 40°C, Humidity < 80%	
Storage Temperature	-20 ~ 60°C	
Material	Aluminium	
H x W x D (mm)	27 x 121 x 140	27 x 121 x 140
Weight (g)	350	380

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CONNECTION DIAGRAM

Connection Interfaces of the Transmitter and Receiver:

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PACKAGE CONTENTS

- 1 × VEX-H14F-10KSM Transmitter Unit
- 1 × VEX-H14F-10KSM Receiver Unit
- 2 × Power Adapter
- 1 × User Manual
- 2 × Foot Pad Set
- (Optional) IR Extension Kit

WARRANTY

- Standard 2 Year Limited Warranty, unless otherwise specified by Sales.
- Optional Advance Replacement Warranty is available upon request

ORDERING INFORMATION

Part Number	Descriptions
VEX-H14F-10KSM	4K30 HDMI Video Extender over Fiber with SC Fiber Port, Audio, 1-Way IR, RS-232 Extension, SM 10Km
(OPTIONAL)	
RXN-ACC-IRK	IR Transmitter and Receiver
VDC-HCL20-001M	Premium High Speed HDMI 2.0 Type A (Male) to Type A (Male) Cable with Ethernet, 4K60, 18Gbps, LSZH, 1m
VDC-HCL20-002M	Premium High Speed HDMI 2.0 Type A (Male) to Type A (Male) Cable with Ethernet, 4K60, 18Gbps, LSZH, 2m
VDC-HCL20-003M	Premium High Speed HDMI 2.0 Type A (Male) to Type A (Male) Cable with Ethernet, 4K60, 18Gbps, LSZH, 3m

CONTACT INFORMATION

For more information, please visit our website or contact our customer service team:

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