

# KVM Extender

## 4K30 Single Head DP KVM Extender over Fiber with Audio, USB 2.0, IR, RS-232 Extension, LC SFP

Model: IPXF-D430-SH550F / SH00KF (SFP Slot)

### PRODUCT OVERVIEW

The KVM Fiber Extender, **IPXF-D430-SH550F/SH00KF**, consists of a transmitter (host) and a receiver (device) unit that extends 4K30 DP video, audio, USB 2.0, IR, and RS-232 signals over duplex multimode or single-mode fiber optic cabling. It supports transmission of 4K30 DisplayPort video to various extension distances using multimode or single-mode duplex LC SFP modules. The actual distance depends on the type of SFP transceivers and fiber cables used.



### USB 2.0 Hub – Plug-and-Play Peripheral Sharing

The KVM Fiber Extender supports USB 2.0 expansion, with a total of four USB 2.0 ports on the receiver (RX) unit – one located on the front and three on the rear panel. These ports are ideal for both long-term and temporary connection of USB peripherals. The USB hub supports most popular operating systems, including Windows, macOS, Chrome OS, and Linux.

### 2-Way Audio

The extender supports bi-directional audio transmission, independently sending audio signals between the transmitter and receiver units. This 2-way audio feature is especially important for PA systems and emergency communication, enabling real-time notifications to the control center and facilitating remote communication and coordination.

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## Smart Audio Extension

The main audio extension channel can be intelligently distributed to either DP audio or the speaker/microphone (SPK/MIC) extension. The SPK/MIC extension has a higher priority than DP audio, and DP audio will be disabled whenever a SPK/MIC connection is detected.

## IR Extension

The IR extension feature supports the full frequency IR range from 38 kHz to 56 kHz. The distance between the IR emitter and the IR port on the unit can be extended for flexible installation of IR control systems. (Up to 1.4 meters IR cable, sold separately.)



## RS-232 Serial Extension with Selectable Baud Rate

The extender enables full-duplex RS-232 communication between the transmitter and receiver. It supports selectable baud rates from 9,600 to 115,200 bps, providing a cost-effective, hardware-based solution for remote access and control of RS-232 devices without software configuration. Ideal for use in digital signage, industrial and commercial automation, smart classrooms, and conference rooms.

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## KEY FEATURES

- Provides reliable remote access to a single-monitor PC via duplex LC SFP fiber modules
- Supports popular video resolutions over DisplayPort, up to 4K @ 30Hz (4:4:4)
- Support Special Aero/Marine Resolution of 2048x2048@60Hz ( 4:4:4 )
- Extends USB 2.0 signals for use with most popular USB devices
- IR extension from console unit to computer unit
- Serial extension for industrial control, supporting 8 baud rate options: 9600–115200bps
- Front USB ports for easy device access
- SFP fiber link supports various extension distances using multimode or single-mode duplex LC SFP transceivers. The actual distance depends on the type of SFP modules and fiber cables used.
- EDID pass-through ensures accurate monitor identification and compatibility
- HDCP 1.4 compliant for proper 4K video playback
- Plug-and-play operation with no driver or software installation required
- Compatible with Windows, macOS, Linux, and Chrome OS
- Fiber link port provides isolation from EMI and electrical noise
- Smart audio extension with auto switch from DP audio to analog audio when there is jack insertion to the 3.5mm audio ports
- Wide power input range: DC 12 ~ 48V

## PACKAGE CONTENTS

- 1 × Transmitter Unit
  - 1 × Receiver Unit
  - 2 × Power Adapters
  - 1 × User Manual
  - 2 × Foot Pad Sets
  - 0 or 2 × Fiber Modules (depending on the ordered SKU)
- (Optional) 1 × IR Extension Kit

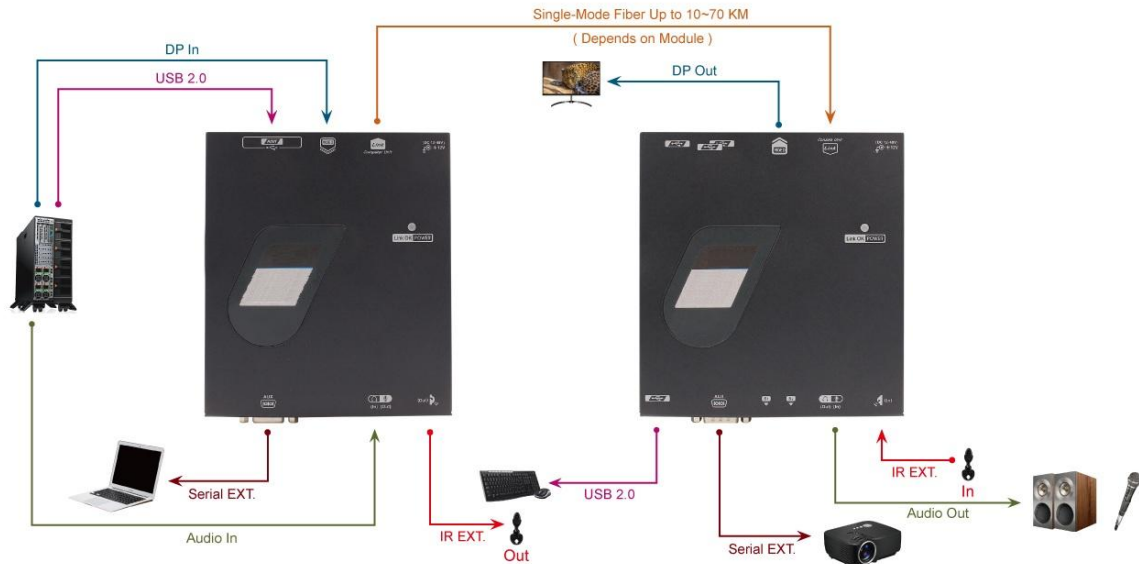
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## PRODUCT SPECIFICATIONS

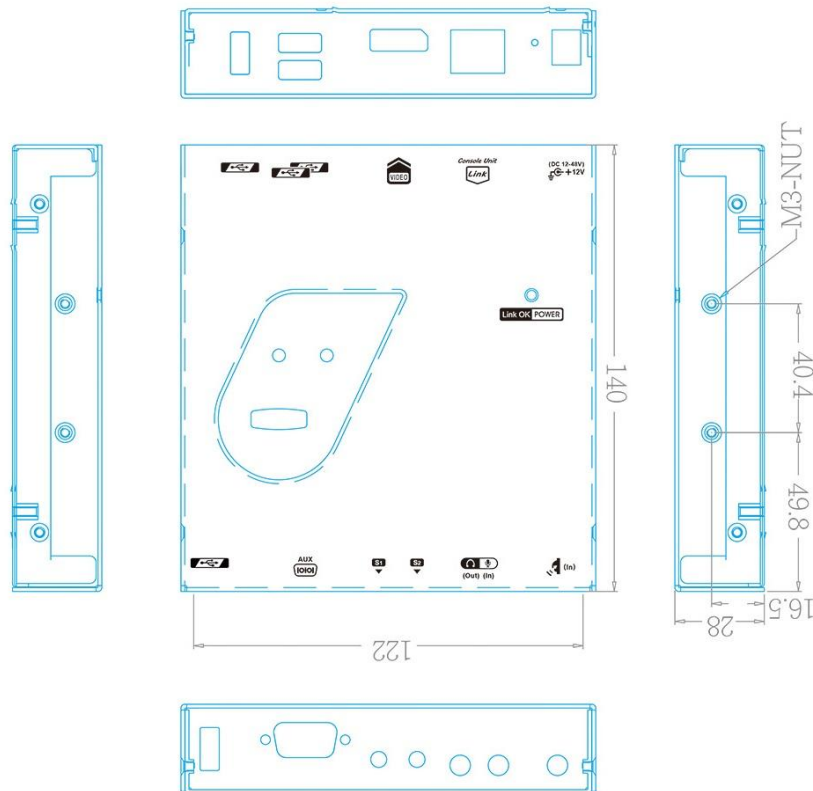
IPXF-D430-SH550F / IPXF-D430-SH00KF <i>(Transceivers not included)</i>	Transmitter	Receiver
<b>Max Resolution</b>	3840x2160@30Hz ( 4:4:4 ) 2048x2048@60Hz ( 4:4:4 )	
<b>Video Interface</b>	DP x 1 (In)	DP x 1 (Out)
<b>USB 2.0 Extension</b>	USB 2.0 Type B x 1	USB 2.0 Type A x 1 (Front) USB 2.0 Type A x 3 (Rear)
<b>Speaker Extension</b>	3.5mm SPK Jack x 1 (In)	3.5mm SPK Jack x 1 (Out) Supports Audio Extract
<b>Microphone Extension</b>	3.5mm MIC Jack x 1 (Out)	3.5mm MIC Jack x 1 (In)
<b>Serial Extension</b> ( 9600 – 115200bps )	DB9 x 1 ( RS-232 DCE )	DB9 x 1 ( RS-232 DTE )
<b>IR Extension</b>	3.5mm x 1 (Out)	3.5mm x 1 (In)
<b>Push Buttons</b>	Reset x 1	Reset x 1 Function x 2
<b>LED Indicators</b>	Status x 1	Status x 1
<b>HDCP Compliance</b>	HDCP 1.4	
<b>Fiber Link Port</b> <b>(1.25Gbps)</b>	SFP Cage x 1 ( Supports 0 ~ e.g., 80 Km with Multimode or Single-mode SFP Modules, distance depends on modules and fiber cables used )	
<b>Extension Range</b> <b>(Depend on Module)</b>	( Duplex OS1 or OS2, 9/125 μm ): 0 ~ e.g., 80 Km with SM Module ( Duplex OM3 or OM4, 50/125 μm ): 0 ~ 550 m with MM Module Distance depends on both fiber modules and fiber cablings used.	
<b>Power Supply</b>	DC 12V ~ 48V	
<b>Operating Environment</b>	Temperature 0 ~ 40°C, Humidity < 80%	
<b>Storage Temperature</b>	-20 ~ 60°C	
<b>Material</b>	Aluminium	
<b>H x W x D (mm)</b>	28 x 140 x 122	
<b>Weight (g)</b>	297	310

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## CONNECTION DIAGRAM



## Unit Dimensions:



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## WARRANTY

- Standard 1-Year Limited Warranty, unless otherwise specified by Sales.
- Optional Advance Replacement Warranty is available upon request

## ORDERING INFORMATION

Part Number	Descriptions
<b>IPXF-D430-SH550F</b>	4K30 Single Head DisplayPort KVM Extender over Fiber with Audio, USB 2.0, IR and RS-232; includes Duplex LC MM 1.25Gbps SFP, range up to 550m
<b>IPXF-D430-SH00KF</b>	4K30 Single Head DisplayPort KVM Extender over Fiber with Audio, USB 2.0, IR, and RS-232 Extension, SFP Slot (Transceivers not included)
<p><b>Note:</b> The <b>IPXF-D430-SH00KF</b> Extender Kit does not include optical transceiver modules. Contact DSGio Sales for supported modules or bundled SKUs. The options include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>○ 1.25Gbps, MMF, 850nm, 550m, Duplex LC</li> <li>○ 1.25Gbps, SMF, 1310nm, 10Km/20Km, Duplex LC</li> <li>○ 1.25Gbps, SMF, 1550nm, 40Km/70Km/80Km, Duplex LC</li> </ul>	
<b>(OPTIONAL)</b>	
<b>RXN-ACC-IRK</b>	IR Extension Kit (Blaster and Sensor)
<b>RXN-ACC-VESA</b>	KVM Extender VESA/Wall-mount Kit

## CONTACT INFORMATION

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

- **Website:** [www.dsgio.com](http://www.dsgio.com)
- **Email:** [sales.apac@dsgio.com](mailto:sales.apac@dsgio.com)

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