



DisplayPort over Fiber Optic Extender

User Manual

Model : DP01F-4K6G-KS
4K60Hz DisplayPort & USB/IR/RS232
KVM Fiber Optic Extender



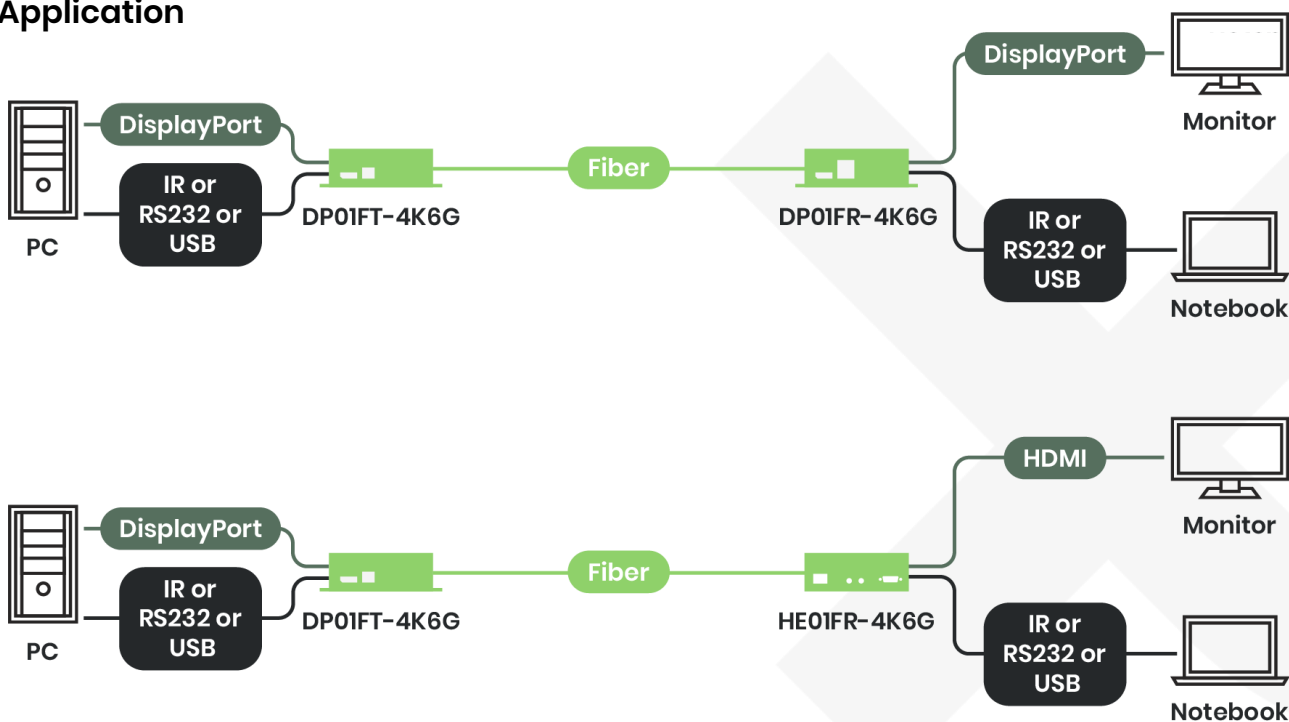
Introduction

DP01F-4K6G is a DisplayPort (DP) extender that overcomes the length restriction of a standard DP cable using fiber optic cable. The extender can send DisplayPort Video & Audio data with USB, RS232 or bi-directional IR signal for up to 60km.

Features

- Supports DisplayPort 1.2
- Supports HDCP 2.2
- Resolution up to 4K@60Hz 4:4:4
- Working distance up to 60 km, depending on the fiber module that is used.
- Supports full-duplex RS232 (115200bps), bi-directional IR (30~60KHz), or 2 ports of USB (keyboard & mouse only) for remote control transmission, either one.
- DP01FT-4K6G could work with HE01FR-4K6G, using DisplayPort as input and HDMI as output.

Application



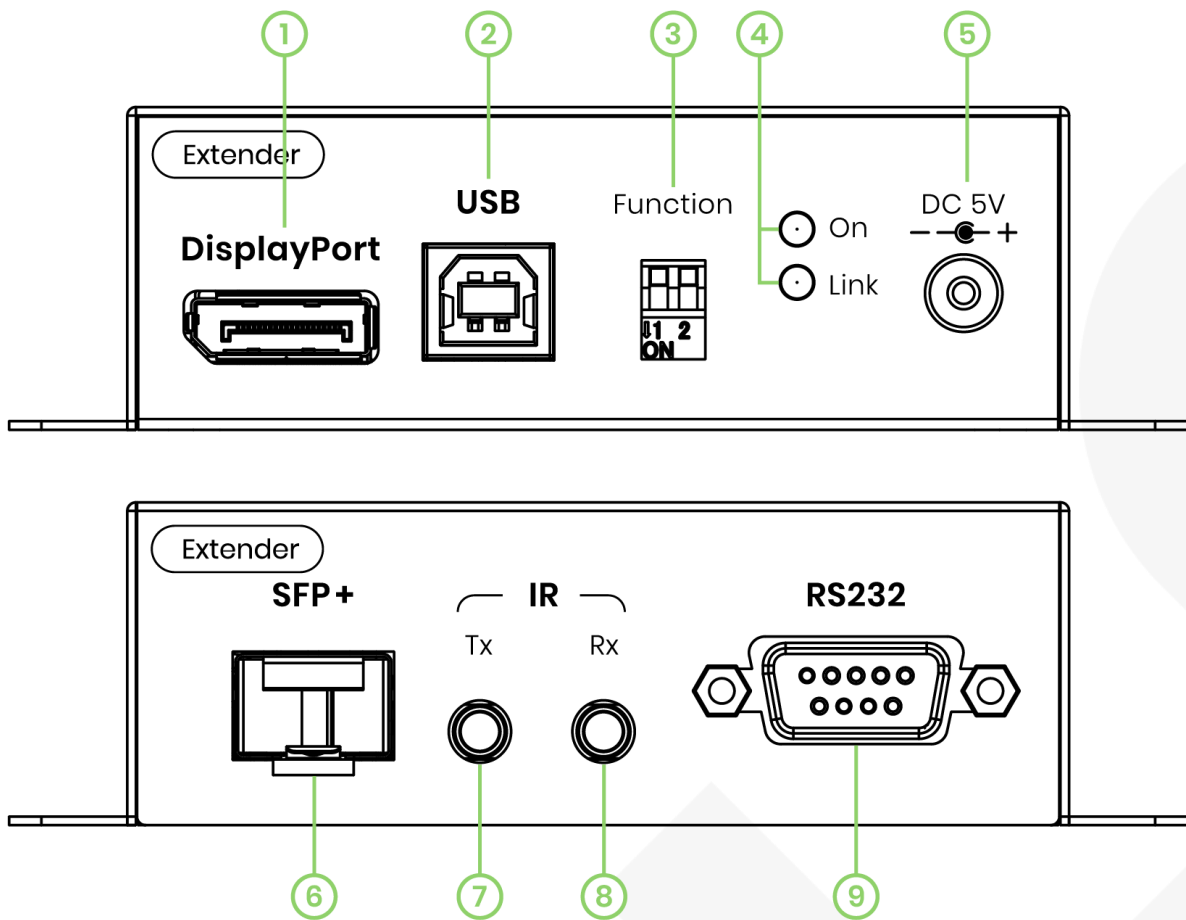
Working Distance

The distance of the fiber module that SC&T offers.

Optical Module	Max. Distance	Max. Resolution
10G SFP+ Fiber Single Mode	10 km	3840x2160 60Hz
10G SFP+ Fiber Multi Mode	300m	3840x2160 60Hz

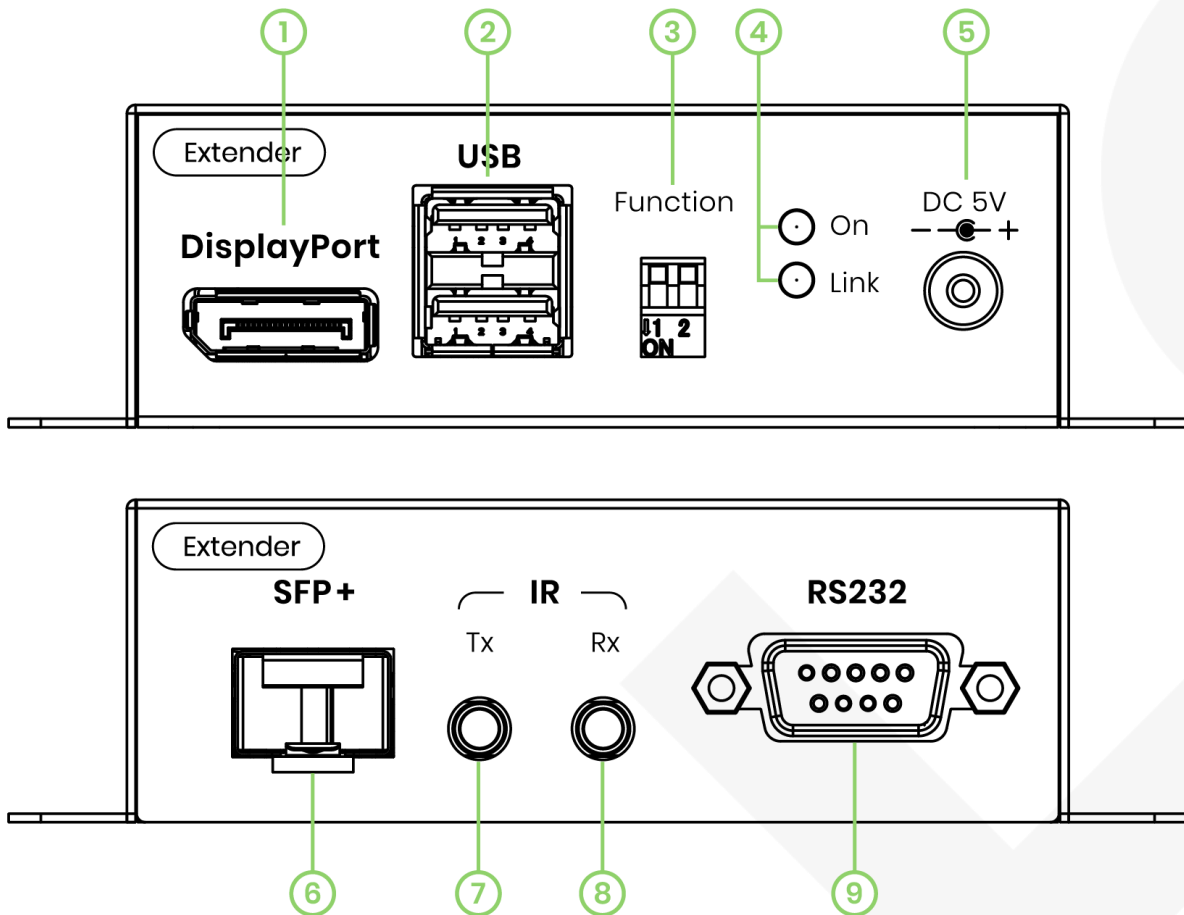
Panel Viewss

DP01FT-4K6G



No	Interface	Description
1	DisplayPort	Connect to DisplayPort Video Source
2	USB Type-B	Connect to USB Host
3	DIP Switch	Select IR/RS232/Keyboard & mouse Extension
4	LED Indicator	Indicate working status
5	DC Jack	Input 5V 2A Power
6	SFP+	Connect to Single/Multi mode SFP+ module
7	IR Tx 3.5mm	Connect to IR Emitter Cable
8	IR Rx 3.5mm	Connect to IR Receiver Cable
9	RS232	Connect to RS232 Female to Male straight cable to PC / RS232 Host

DP01FR-4K6G



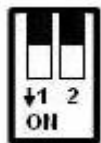
No	Interface	Description
1	DisplayPort	Connect to DisplayPort Monitor
2	USB Type-A	Connect to USB devices
3	DIP Switch	Select IR/RS232/Keyboard & mouse Extension
4	LED Indicator	Indicate working status
5	DC Jack	Input 5V 2A Power
6	SFP+	Connect to Single/Multi mode SFP+ module
7	IR Tx 3.5mm	Connect to IR Emitter cable
8	IR Rx 3.5mm	Connect to IR Receiver cable
9	RS232	Connect to RS232 Female to Female cross cable to PC / RS232 Devices

LED Indicator

LED Indication	LED Color	Status
Power	GREEN On/ Off	Power On/ Off
Connection	BLUE On/ Off	Fiber Linked/ Unlinked

DIP Switch

Follow the instructions below to enable IR, RS232 or keyboard & mouse extension. Please also note that ON refers to ↓, and OFF refers to ↑



Switch	Function					
SW 1	ON	IR Extension	OFF	RS232 Extension	ON	Keyboard & Mouse Extension
SW 2	OFF		ON		ON	

RS232 PIN Define

DB9(Female)	
Pin	Define
Pin 2	TX
Pin 3	RX
Pin 5	GND

DB9(Male)	
Pin	Define
Pin 2	RX
Pin 3	TX
Pin 5	GND

Caution

- Using VESA certified DisplayPort cable to transfer high-resolution video is recommended
- Power consumption may vary according to the connected USB devices
- DO NOT put IR Emitter/Receiver cables too close to each other to avoid interference.
- This product is designed for indoor applications. If it is desired for outdoor use, please install additional equipment for waterproof protection and surge protectors to prevent damage caused by lighting.
- Do not put anything on the power and system cables; place them where they cannot be stepped on. Please be sure there is nothing resting on any cables.
- Avoid using this product close to water places, or near high-temperature devices such as radiators, stoves, etc.
- Shut down the power supply and unplugged all equipment immediately if:
 - water or any kind of liquid has been spilled into the product;
 - the product has been damaged by external force;
 - the product does not operate normally as this manual indicates;
 - Please contact us for further repair if the above conditions happen.

Package Includes

Item	Amount
DP01FT-4K6G	1
DP01FR-4K6G	1
10G SPF+ Single-mode Optical Transceiver	2
DC5V 2A adaptor	2
USB A/B cable	1

Specification

ITEM NO.	DP01FT-4K6G	DP01FR-4K6G
Support		
Compliance	DP 1.2, HDCP 2.2	
Max. Video Resolution	4K@60Hz 4:4:4	
Max. Transmission Distance	60km over single-mode 300m over multi-mode	
Audio Format	DisplayPort Audio pass-through	
RS232 Baud Rate	115200 bps (Full Duplex)	
IR Support	30~60KHz, $\pm 10^\circ$, 5M, Bi-Directional	30~60KHz, $\pm 55^\circ$, 5M, Bi-Directional
Ports & Interfaces		
Video Input	1 x DisplayPort	1 x SFP 10G+
Video Output	1 x SFP +	1 x DisplayPort
RS232 Interface	1 x DB9(Female)	1 x DB9(Male)
IR Interface	2 x 3.5mm Phone Jack	2 x 3.5mm Phone Jack
USB Interface	1 x USB Type B	2 x USB Type A
Power		
Power Supply	DC 5V 2A	
Power Consumption	5.5 W (For DP01FR-4K6G, Power consumption may vary according to the connected USB devices)	
Ambient Temperature		
Operation	-10 ~ 45°C	
Storage	-30 ~ 70°C	
Working Altitude	2000m	
Humidity	Up to 95%	
Physical Characteristics		
Dimensions	109.6 x 114.5 x 30mm	109.6 x 114.5 x 30mm
Weight	262g	260g