



## M1-DP&HDMI-Pro

One core single mode DP1.2 / HDMI2.0 fiber extender

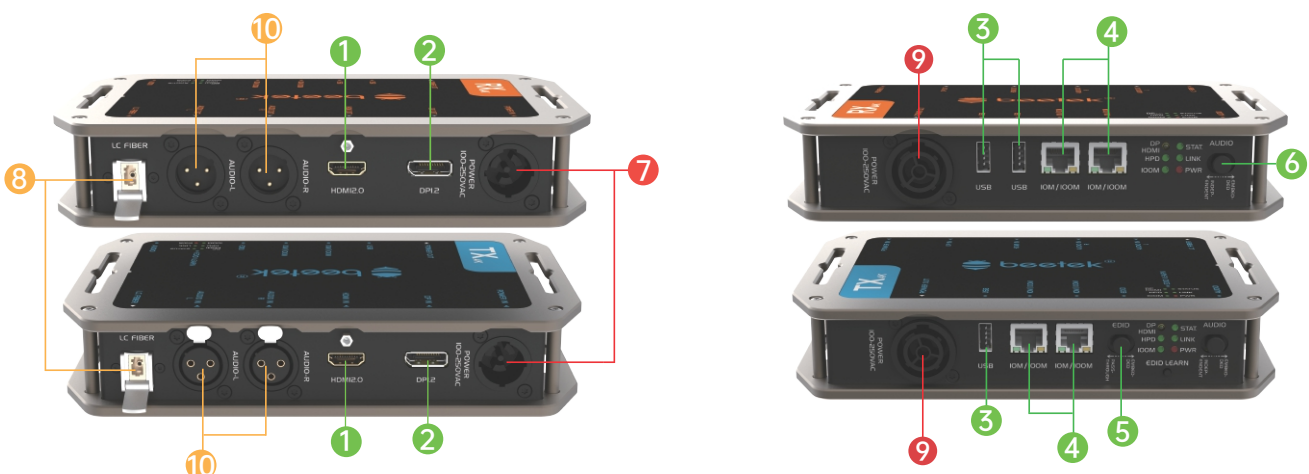
Product number:2.03

## Summary

The **M1-DP&HDMI-Pro** is an uncompressed, zero-frame delay, versatile KVM single-mode fiber extender that transmits an HDMI 2.0 or DP 1.2 signal losslessly up to 300 meters over a single LC fiber. The maximum resolution is 3840\*2160@60Hz 4:4:4, and it has two-way 100 Gigabit Ethernet, USB and audio interface, which supports two-way transmission of data, keyboard and mouse and control signals, as well as independent audio transmission and audio de-embedding. There are three EDID modes consisting of built-in, learning, and transparent transmission. There are EDID learning and mode switching buttons, which are suitable for various scenarios. With support for one HDMI or one DP input, one HDMI or one DP output, you can choose which input and output you need, and the conversion is done automatically. In addition, there is built-in input and output automatic signal identification and conversion. The full-featured HDMI and DP interfaces support HDR, HDCP, ARC, CEC and 3D, plug and play. We designed this product with locking power supplies and dust-proof fiber interface latches which make signal connection more reliable. An optional 1U rack tray is available for cabinet installation, making it suitable for long-distance HDMI signal transmission in a variety of environments.



## Product view



number	name	number	name
①	HDMI TypeA (F)	⑥	De-embed button
②	DP interface	⑦	Power interface
③	USB interface	⑧	LC fiber interface
④	RJ45 interface	⑨	Power loop out
⑤	EDID button	⑩	audio

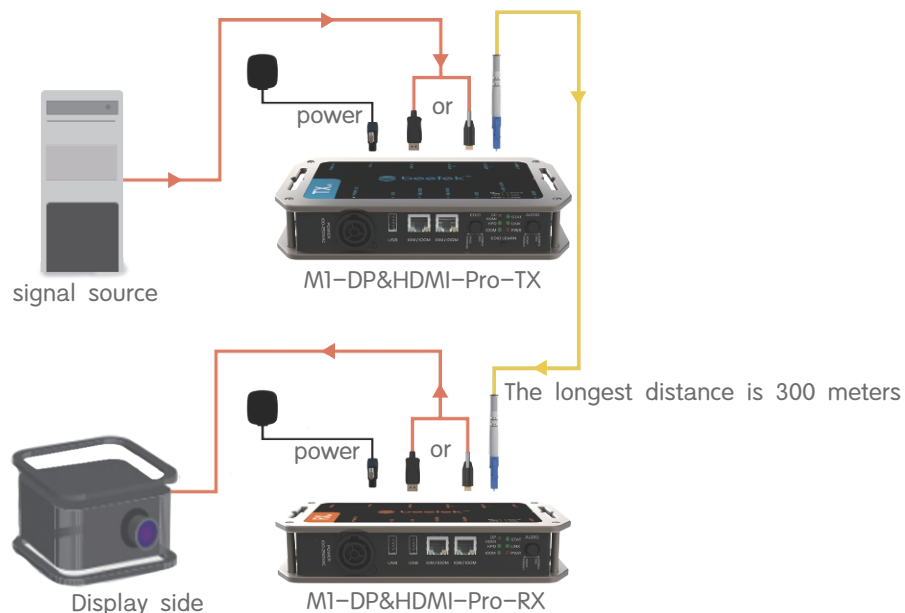
## Technical characteristics

- ✦ One-core single-mode HDMI 2.0 + DP1.2 + Audio + Ethernet + USB multi-function optical fiber extender.
- ✦ Lossless video extension without compression and zero-frame delay, 100% restoration of source signal.
- ✦ The maximum transmission rate is 21.6Gbps, and the maximum support is 3840\*2160@60Hz.
- ✦ Single-mode G657.A1 optical fiber with one-core LC connector, which can transmit up to 300 meters.
- ✦ The transmitter has one HDMI and one DP input, and the receiver has one HDMI and one DP output.
- ✦ Built-in automatic signal sensing and automatic conversion allows any input and output selection without using manually settings.
- ✦ Supports bi-directional 100 Gigabit Ethernet, USB1.1, audio card and daisy-chain power supply interface.
- ✦ Supports audio de-embedding, KVM keyboard and mouse, audio, and independent Ethernet transmission.
- ✦ Multiple methods of EDID include transparent, built-in and learning mode making it suitable in various applications.
- ✦ Six-way LED indicator for signal, power, Ethernet, EDID, status and hot-plug detect makes troubleshooting fast and easy.

- ◆ Locking and daisy-chaining power interfaces, locking HDMI interfaces, and dust-proof optical fiber interfaces, ensure a reliable connection.
- ◆ Full-featured HDMI 2.0 and DP 1.2 support HDR, HDCP, ARC, CEC and 3D.
- ◆ Velcro strap hole and optional 1U rack tray make installation easy.

## Application view

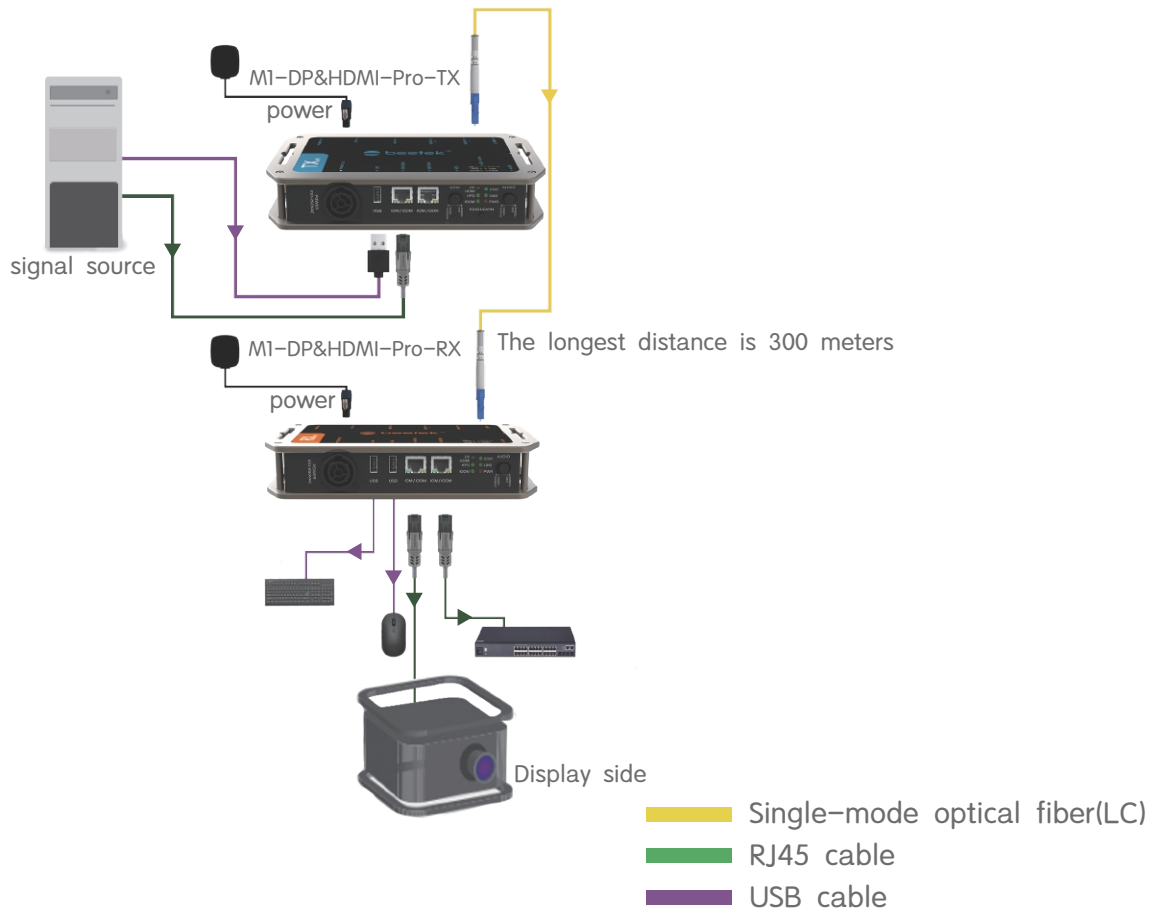
### 01 Supports any output and input



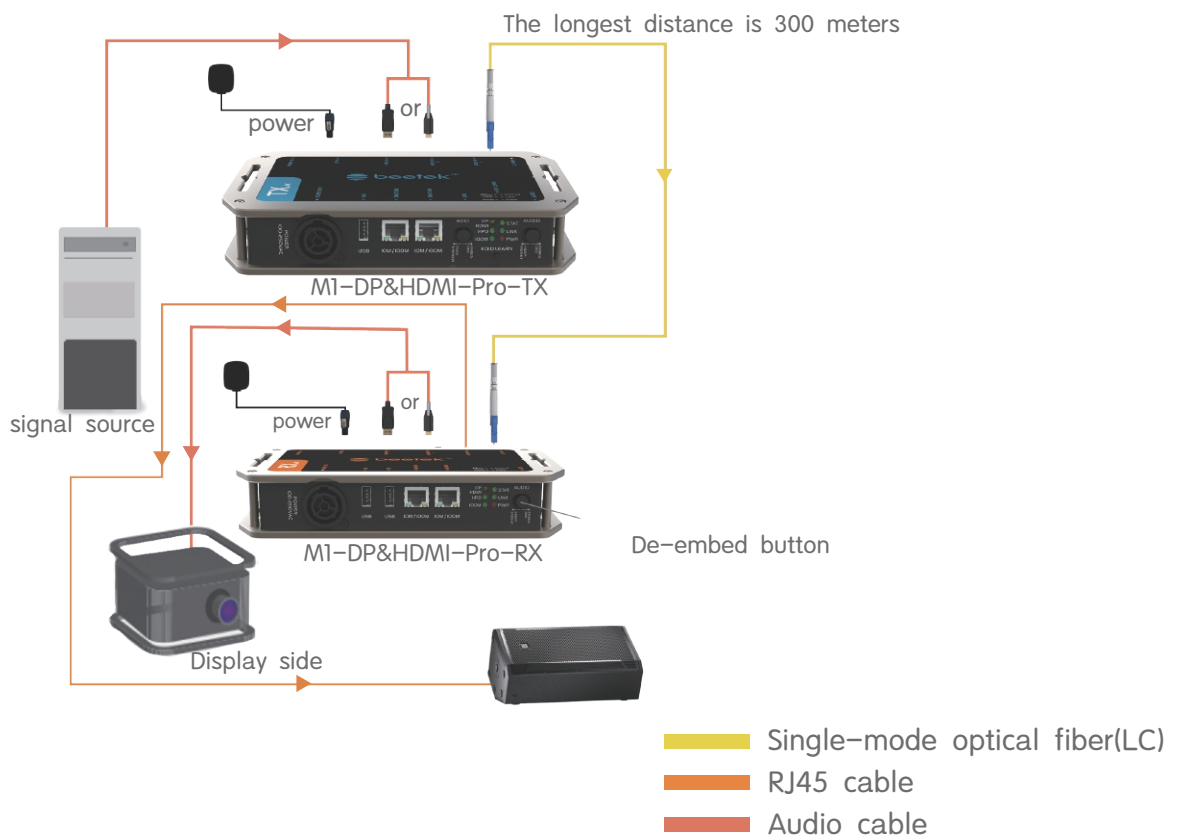
One HDMI or DP input, one HDMI or DP output,  
HDMI takes precedence when both HDMI and DP are connected

- Single-mode optical fiber(LC)
- DP/HDMI cable

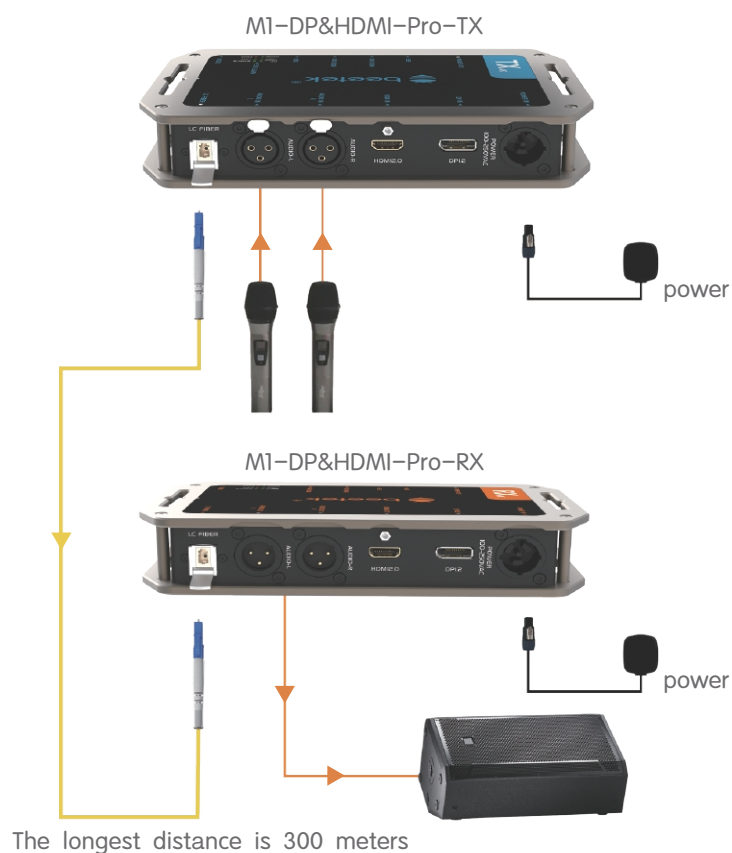
02 Supports KVM (keyboard mouse) and two-way Ethernet transmission



03 Supports audio de-embedding



## ④ Supports independent audio channel transmission



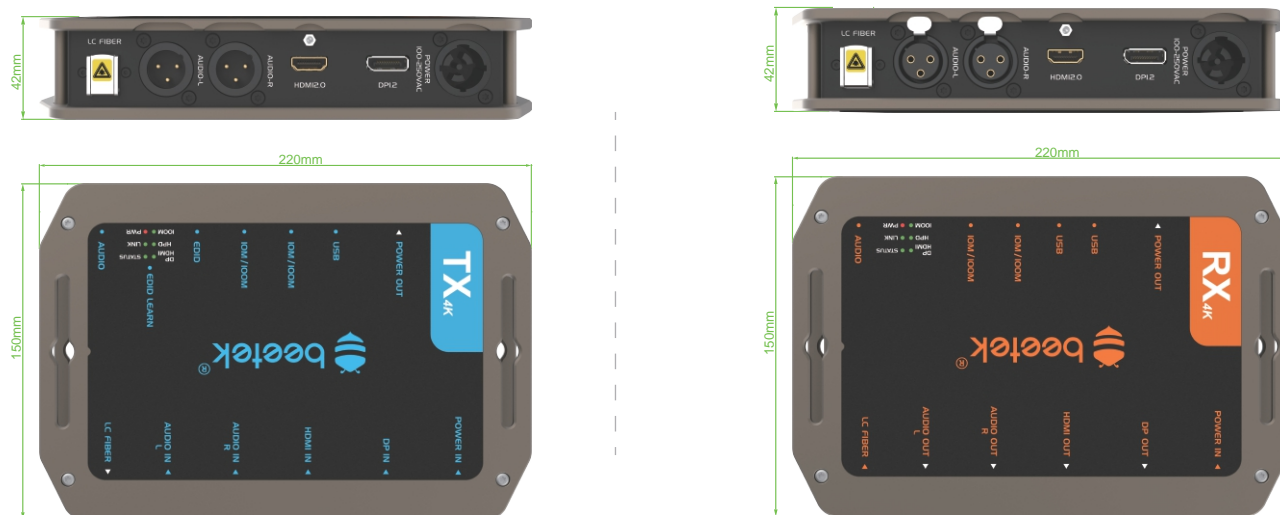
— Single-mode optical fiber(LC)  
— Audio cable

## Product parameter

name	parameter
Signal	DP1.2、HDMI2.0
Input Connector	TX: HDMI Type A Female, DP Female, UBS Type A Female, RJ45 *2, XLR Female *2 ; RX: Single-core LC
Output Connector	TX : Single-core LCRX: HDMI Type A Female, DP Female, UBS Type A Female *2, RJ45*2, XLR *2
Locking Connector	Yes
Fiber Interface Dust Prevention	Yes
Fiber Type	Single-mode G657.A1
Indicator LED	Signal, Power, Network port, EDID, Status and Hot-plug 6 way Indicator
Rack Mountable	Yes (standard 1U rack mount)
Anti-slip pad	Yes
Locking power connector	Yes
Waterproof power connector	Yes (NEUTRIK waterproof power connector)
Daisy-chainable power	Yes

name	parameter
Power Consumption	AC 100–250V
Ambient Temp	–20° C ~ 70° C
Material	Aluminum alloy mold
Dimensions	TX: 220 *150 *42mm; RX: 220 *150 *42mm
Weight	TX: 1.20kg; RX : 1.25kg
Package Dimensions	274 *252 *212mm
Package Weight	3.65kg
EDID Switch (TX)	Learn button and mode dial
EDID Modes	Pass-through, learn and Internal
DDC	Yes
AUX	Yes
De-embedding (RX)	Audio de-embedding toggle switch
Independent USB	Supports independent USB1.1 transmission
Audio De-embedding	Yes
Independent audio	Supports independent stereo audio transmission
Independent Ethernet	Supports bidirectional 100M Ethernet
DP transmission	Supports independent DP signal transmission
HDMI transmission	Supports HDMI signal transmission
HDMI to DP	Supports TX HDMI input to RX DP output
DP to HDMI	Supports TX DP input RX HDMI output
HDMI Audio	Supports extended HDMI audio
3D	Yes
CEC	Supports in EDID pass-through mode
ARC	Supports in EDID pass-through mode
HDCP	Supports HDCP2.2 in EDID pass-through mode
XvYCC Color Space	Yes
HDR	Yes
BT.2020 Color Space	Yes
Optical Module	4*10G , 2*2.5G 6-channel single-mode optical module
Technical Characteristics	6-wave CWDM Technology
Optical module life	100,000 Hours
Resolution	3840 * 2160@60Hz
Transmission Distance	Single-mode 300M
Clock Bandwidth	600MHz *3 / 540MHz *4
Transmission Speed	21.6Gbps
Balancing Chip	Automatic equalization
Reclocking	Yes
ESD Protection	Yes
Hot Plug	Yes
Delay	Zero-frame
Compression	None
Sampling Rate	Bandwidth Range: 8~16bit
Sampling Ratio	RGB 4:4:4 、 YUV 4:4:4、 YUV 4:2:2、 YUV 4:2:0

## Dimensional drawing



- Product size TX: 220 \*150 \*42mm; RX: 220 \*150 \*42mm
- Product weight TX: 1.20kg; RX : 1.25kg
- Package size 274 \*252 \*212mm
- Packing weight 3.65kg