

Extends DisplayPort 4K2K@60Hz Link Up To 200 Meters



Description

DisplayPort combines the audio and video through an interface. It supports high resolution displays and multiple displays with a single cable, and increases the efficiency and bandwidth of the display. Low-cost, high performance and easy-to-use make the displayPort become a popular application.

APAC ADP-UD-200-MPO extender uses MPO fiber to enlarge communication distance, this extender can enable transmission of 4K2k@60Hz up to 200 meters, where radio frequency interference phenomenon is literally ruled out, which shows the advantage of high performance and good signal quality as well as low cost.

Features

- Extend the distances up to 200m (660 feet) with a high resolution 3840*2160.
- Comply with DisplayPort v1.2 standard for DPCP (DisplayPort Content Protection).
- Data transmission fully compliant without copper wire
- No RF interference by optical fiber
- Class 1 laser product complies with EN 60825-1

Application

- Remote monitor for medical, industrial, military control
- Far-end LCD, Projector, Plasma display connection
- Large video wall system



(12 Core MPO Multimode Cable)

Page 1 of 6 Version 1.2 Date:07/03/2015

Application Note

Headquarters:

3 Tzu Chiang Road, Hsinchu Industrial Park, Hukow,

Hsinchu Hsien, Taiwan 303 TEL: +886-3-5986799 FAX: +886-3-5986655



Extends DisplayPort 4K2K@60Hz Link Up To 200 Meters

Ordering information

ADP-UD-200-MPO-XX O0: US Plug for AC adaptor 01: EU Plug for AC adaptor 02: BS Plug for AC adaptor

03: AU Plug for AC adaptor

This product does not include optical fibers

Package include

• TX box \times 1

• RX box x 1

• 5V adaptor \times 2

Optional: US/EU/BS/AU Plug change kit of 5V adaptor

Specification

Specification		
PARAMETER	SPECIFICATION	NOTE
Max length	200M	
Max resolution	3840×2160	
Max video bandwidth	5.4 Gbps per channel	
HDCP compliant	YES	
Optical connector	MPO	
Recommended Fiber	50/125 um MMF	
Optical property	850nm	
Optical Link Power Budget	10dB (min)	
Operating voltage	DC 5V	
El (' 1D ('	TX: 5W	5V/1080mA
Electrical Power consumption	RX: 5W	5V/1040mA
Operating Temperature	-10°C to 50°C	
Storage Temperatute	-20°C to 75°C	
Dimension	141 × 72.4 × 30	$L \times W \times H (mm)$
Weight	245g	TX unit or RX unit

Page 2 of 6 Version 1.2 Date:07/03/2015 Headquarters:

3 Tzu Chiang Road, Hsinchu Industrial Park, Hukow,

Hsinchu Hsien, Taiwan 303 TEL: +886-3-5986799 FAX: +886-3-5986655 Website: www.apacoe.com.tw



Extends DisplayPort 4K2K@60Hz Link Up To 200 Meters

Requirements

- DisplayPort Source (PC/NB/MAC graphic card DP output)
- DisplayPort Sink (DP monitor or projector)
- 100~240VAC 50~60Hz 0.2A electricity

Adaptor Specification

PARAMETER	SPECIFICATION	NOTE
Input	100~240VAC	US/EU/BS/AU Plug is optional
Output	DC 5V	2.0 A
DC Jack	Inside 5V / Outside ground	



MPO Cable Fiber Assignment



Page 3 of 6 Version 1.2 Date:07/03/2015 Headquarters:

3 Tzu Chiang Road, Hsinchu Industrial Park, Hukow,

Hsinchu Hsien, Taiwan 303 TEL: +886-3-5986799 FAX: +886-3-5986655



Extends DisplayPort 4K2K@60Hz Link Up To 200 Meters

DPCP compliant

DPCP (DisplayPort Content Protection) is a copy protection standard. That is created by AMD and uses 128-bit AES encryption. DPCP includes a receiver and a transmitter which can be verified independently. The function can prevent the data to send to the unauthorized users.

Installation

- Step1. Install TX box close to DisplayPort signal source, such as PC or NB.
- Step2. Install RX box close to DisplayPort sink, such as DisplayPort monitor or projectors.
- Step3. Connect TX box and RX box through optical fiber cable (MPO).
- Step4. Apply 5V adaptor power to TX box and RX box.
- Step5. Connect DisplayPort cable from TX box to Source.
- Step6. Connect DisplayPort cable from RX box to Sink.
- Note 1: Clean fiber connector before plugging in. The dust will impact fiber communication performance.
- Note 2: The length of DisplayPort cable should be NOT longer than 2 meters.
- Note 3: These four indicators in front of TX/RX box represent working status. These 4 LEDs emerged green if all setup is complete and correct. The left one stands for the connection of power supply. The second light stands for the connection of DisplayPort source. The third light stands for the connection of DisplayPort sink. The right one stands for the connection of fiber between the TX box and RX box.

Displayport Extender	Power	Source	Sink	Fiber	(

Page 4 of 6 Version 1.2 Date:07/03/2015

Headquarters:

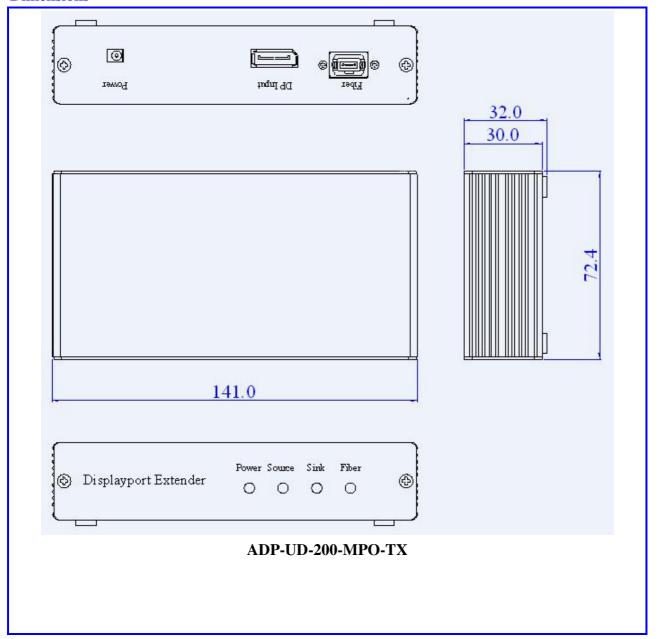
3 Tzu Chiang Road, Hsinchu Industrial Park, Hukow,

Hsinchu Hsien, Taiwan 303 TEL: +886-3-5986799 FAX: +886-3-5986655



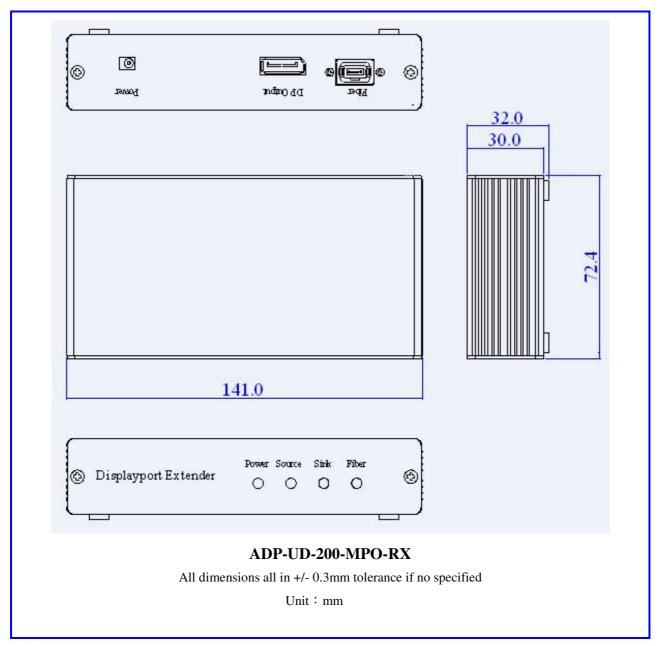
Extends DisplayPort 4K2K@60Hz Link Up To 200 Meters

Dimensions





Extends DisplayPort 4K2K@60Hz Link Up To 200 Meters



Safety Regulation

CE and FCC approved.



Page 6 of 6 Version 1.2 Date:07/03/2015 Headquarters:

3 Tzu Chiang Road, Hsinchu Industrial Park, Hukow,

Hsinchu Hsien, Taiwan 303 TEL: +886-3-5986799 FAX: +886-3-5986655