



EverPro Technologies Company Ltd.

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USB3.0 Hybrid Active Optical Cable

EPU3HC-A0B3

Rev 1.5



EverPro Technologies Company Ltd.



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1 Description

In order to compensate for ordinary USB3.0 active fiber cable' s defect that can' t supply power to device, EverPro introduce new generation of USB3.0 hybrid cable (EPU3HC). On the basis of the use of optical fiber as the transmission medium, EPU3HC integrate copper to achieve the purpose of supplying power to device. The hybrid cable length can be up to 50m without adding any relay device which is suitable for the scene of having no on-site power supply. Everpro' s EPU3HC-A0B3 product can be easy to use for Machine Vision application because of its MicroB connector with screw locked.

2 Feature

- The maximum cable length can be up to 50m
- The maximum transition speed can be up to 5Gbps
- Without power
- Providing maximum 900mA/5V for the device
- With locking screws
- Hot-plugging
- No driver
- Anti-jamming



3 Specification

Physical Specification

| | |
|----------------------|---|
| Host Side | USB3.0 Standard-A Plug |
| | USB2.0 Micro-B Receptacle , Auxiliary power supply for device with >2W power dissipation. |
| Device Side | USB3.0 Micro-B Plug (with locking screws) |
| Dimension of The End | Host Side : 44mm/27mm/13mm |
| | Device Side : 36.5mm/22mm/8.5mm |
| Net Weight (Type.) | 385g (10m) |
| Cable Diameter | 3.7mm |
| Bend Radius | 20mm |
| Cable Length | Up to 50m |
| Option Cable length | 10m/20m/30m/50m |

Electrical Specification

| | |
|------------------------------|---|
| Supply Voltage | 4.75~5.25V |
| Supply Current | <600mA |
| Power Dissipation | <3.15W |
| Device Side Supply Current * | Maximum 5V 900mA(10m/20m/30m)/600mA(50m) |

Note: * Need to connect Auxiliary power supply to host side



Environmental Specification

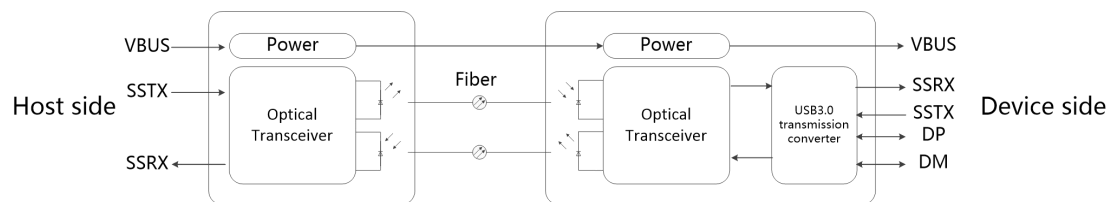
| | |
|------------------------------------|------------------|
| Operating Environmental conditions | |
| Temperature (°C) ; | 0 - 50°C |
| Humidity (%) | 15% - 85% |
| Pressure | 700hPA - 1060hPA |
| Max. temperature gradient : | 6 °C / h |
| | |
| Transport Environmental conditions | |
| Temperature (°C) ; | -20 - 50 °C |
| Humidity (%) | 5% - 95% |
| Pressure | 700hPA - 1060hPA |
| Max. temperature gradient : | 10 °C / h |
| | |
| Storage Environmental conditions | |
| Temperature (°C) ; | -20 - 80 °C |
| Humidity (%) | 5% - 95% |
| Pressure | 700hPA - 1060hPA |
| Max. temperature gradient : | 10 °C / h |

General Information

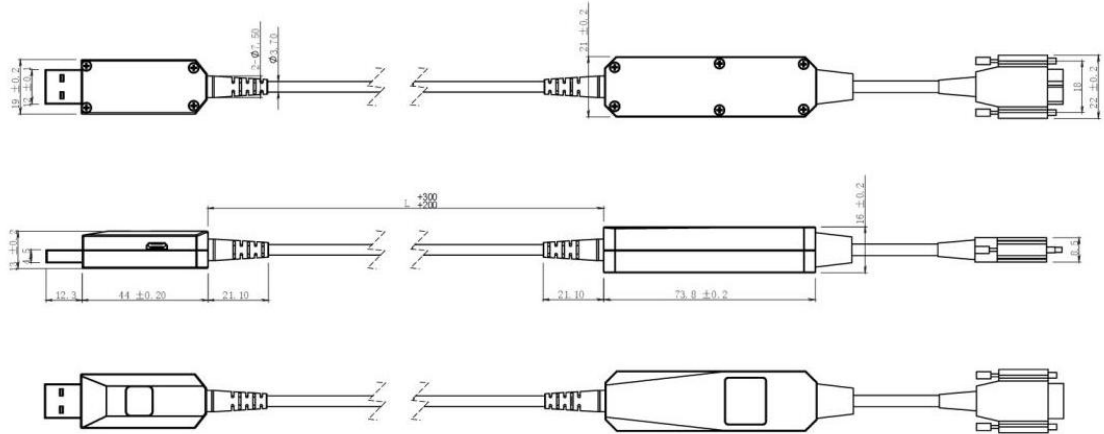
| | |
|-----------------|--------|
| ROHS Compliance | Yes |
| CE Conformity | Yes |
| UL Conformity | UL 758 |
| Warranty | 1 year |

Technical Description

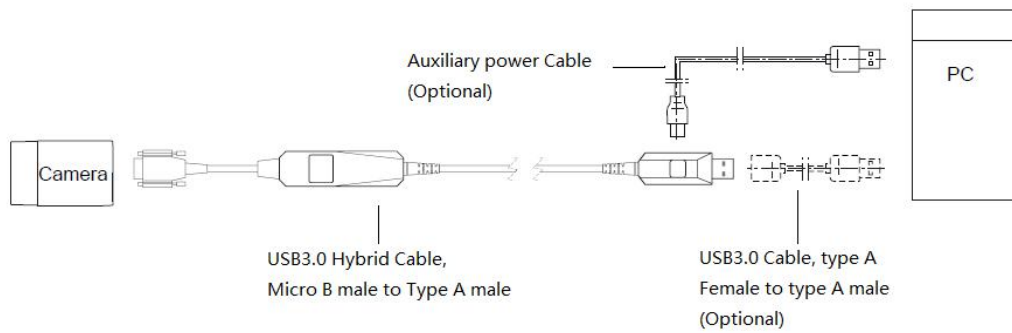
EPU3HC series built-in optical transceiver chip to complete the OE & EO conversion.



4 Mechanical Dimensions



5 Cable Connections Overview





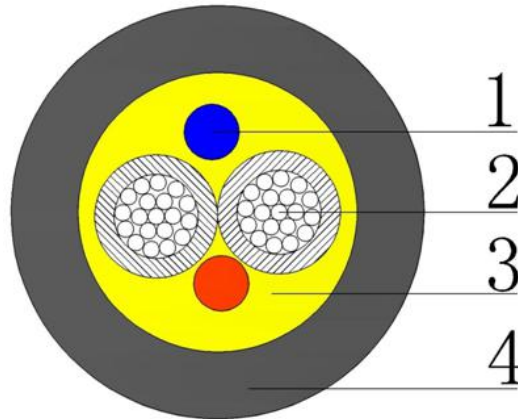
6 Part Number

| Part Number | Description |
|--------------------|---|
| EPU3HC-AOB3K005MAM | 5 meters USB3.0 Hybrid Cable with Type A plug-MicroB Plug with locking screws |
| EPU3HC-AOB3K007MAM | 7 meters USB3.0 Hybrid Cable with Type A plug-MicroB Plug with locking screws |
| EPU3HC-AOB3K010MAM | 10 meters USB3.0 Hybrid Cable with Type A plug-MicroB Plug with locking screws |
| EPU3HC-AOB3K020MAM | 20 meters USB3.0 Hybrid Cable with Type A plug-MicroB Plug with locking screws |
| EPU3HC-AOB3K030MAM | 30 meters USB3.0 Hybrid Cable with Type A plug-MicroB Plug with locking screws |
| EPU3HC-AOB3K050MAM | 50 meters USB3.0 Hybrid Cable with Type A plug-MicroB Plug with locking screws |

Note1 : All of standard cables have Everpro LOGO. NRE is need if adding customized logo.

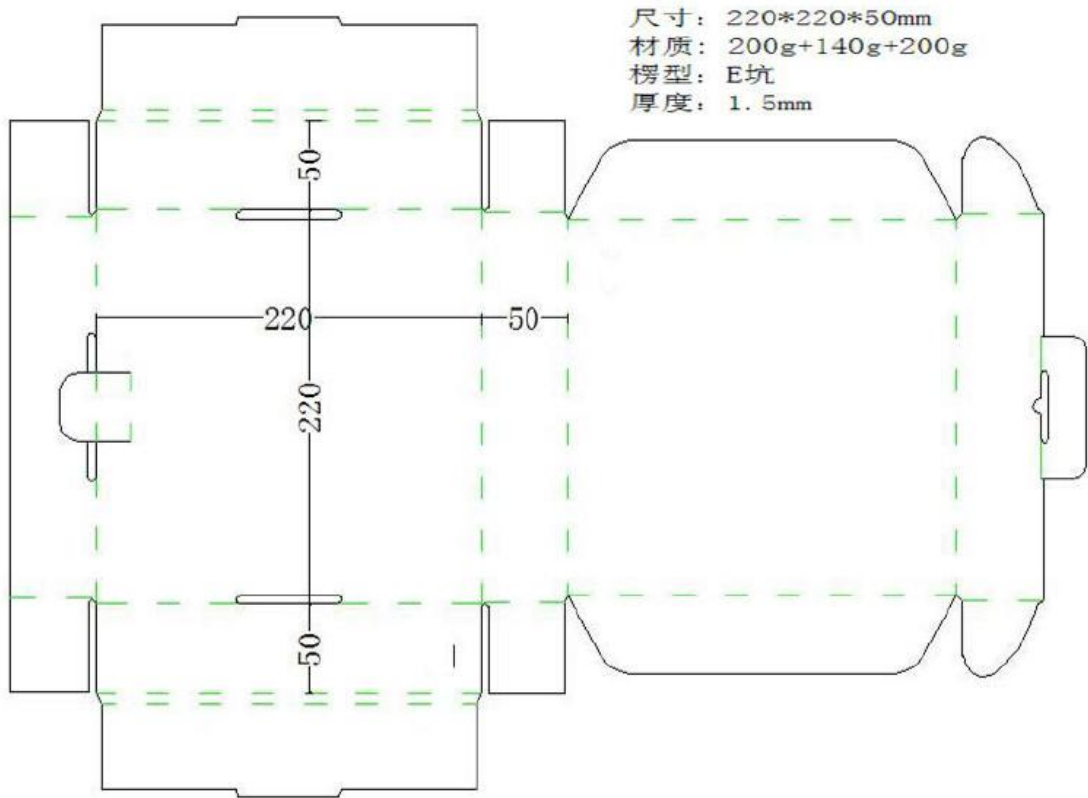
Note2 : Lead time will be increased if need customized length.

7 Fiber Specification



| Item | Contents | Value | Supplement |
|------|-----------------------|-----------------|---------------|
| 1 | Fiber | OM1 | 2 cores |
| 2 | Stranded Copper Wires | 21*0.15,22AWG | 2 cores |
| 3 | Kevlar | Strength Member | 5*1610dtex |
| 4 | Outer Jacket | Black TPU | OD: 3.7±0.2mm |

8 Package Information



9 Application

- Machine Vision Camera Extension
- Security Camera Extension
- Digital Signage and TV Wall
- Smart Digital Video Surveillance System
- Zero Client Connectivity
- Remote Storage