

### Miniature Day/Night Exchanger



Fig 1. CCS-EXM-IRC21 (left), M12-EXM-IRC21 (right)

### Description

The M12-EXM-IRC21 and CCS-EXM-IRC21 are IR cut-off filter exchangers that allow true day/night (TDN) operation with the Pixim DPS chipsets. For daytime operation an absorptive color filter provides true color rendition. At night, an AR coated window allows maximum light transmission.

### Key Features

- Maximum light transmission in low-light conditions
- True color rendition during the day
- Designed specifically to fit the Pixim DPS chipsets
- Absorptive filter optimized for best color
- Latching solenoid requires power only to switch

### Applications

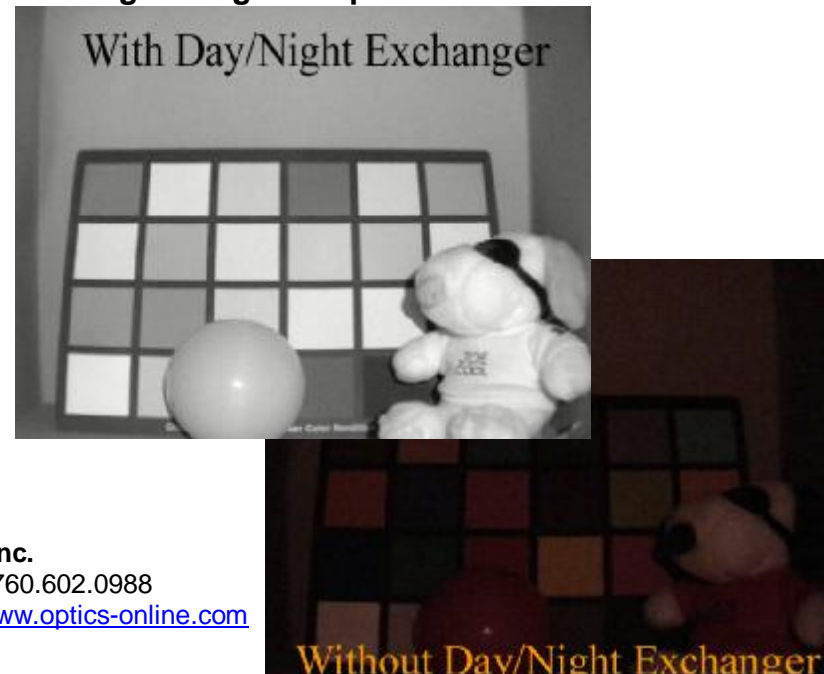
- Security and surveillance camera

SUBJECT TO CHANGE WITHOUT NOTICE

### Key Specifications

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<b>Description</b>	IR cut filter exchanger
<b>Latching Solenoid</b>	Power required only to switch; see specs
<b>Switch signal</b>	±3.3V 100ms
<b>Integrated Lens Mount</b>	M12-EXM-IRC21: M12x0.5 CCS-EXM-IRC21: None
<b>Day Operation</b>	IR cut filter, IRC21
<b>Night Operation</b>	AR coated window
<b>Operational Mode</b>	Standard Mode +red, -black. Reverse anode/cathode to reverse mode. Day mode: IRC21, Night mode: window
<b>Min nominal BFL</b>	~5mm (M12-EXM Only)

### Low-Light Image Comparison



Sunex Inc.

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Order samples online at [www.optics-online.com](http://www.optics-online.com)

## M12-EXM-IRC21

### Electrical and Mechanical Specifications (mm):

Note:

1. Holder and vane Material: PC(Black)

2. Electric specification:

- Rating voltage: 3.0DCV
- Power consumption: 0.81W at 3.0DCV
- Work voltage: 2.5 to 3.5DCV (3.0V-3.3V Recommended)
- Rating current: 270mA
- DC resistance: 110OHM +5 % at 20 degree
- Insulation resistance: 50M OHM min at 500V
- Resist voltage: 250V AC 1 Minute
- Work temperature: -10 to +40
- Lifetime : 30000 times min

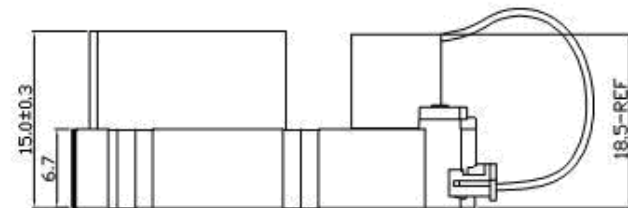
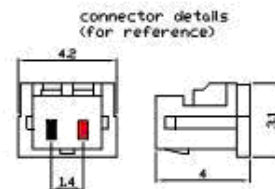
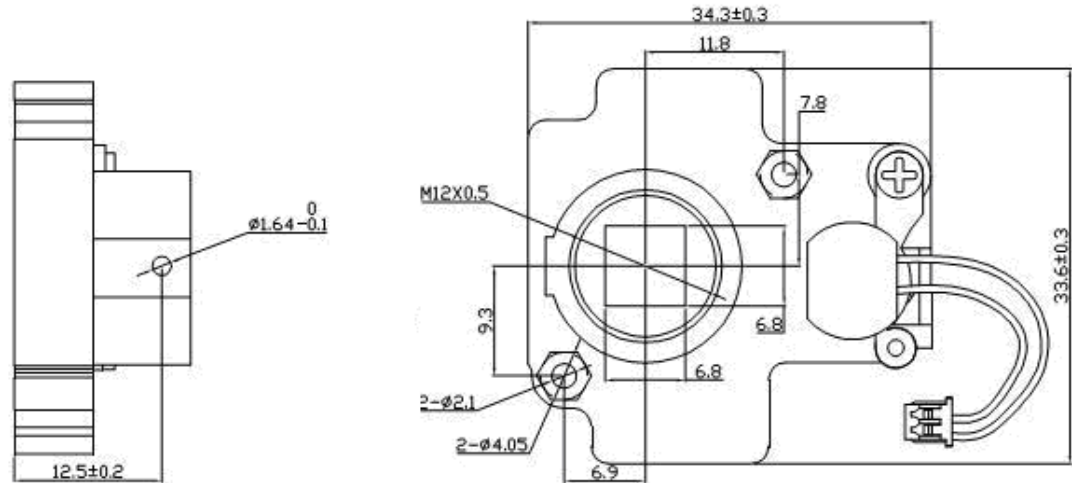
3. Standard 2-pin connector with >70mm wire

4. Reverse anode/cathode for operation

5. Work mode:

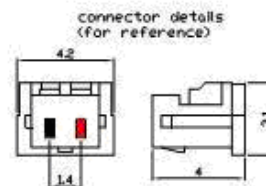
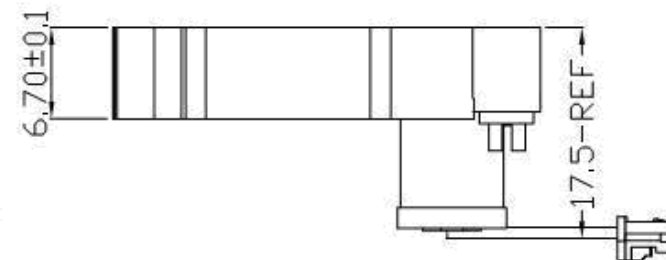
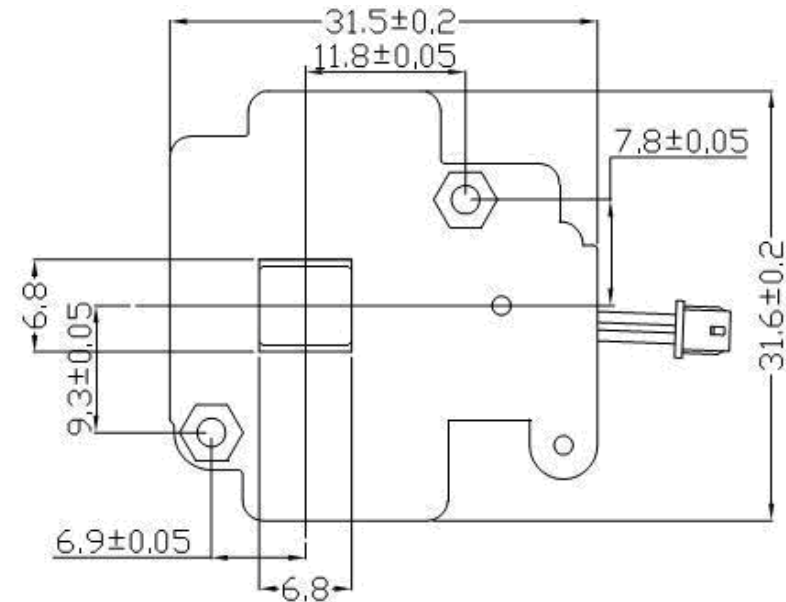
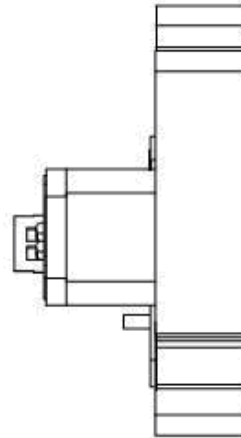
night mode: filter C-K9(1.2mm thickness)

day mode: filter QB21(1.2mm thickness)



## CCS-EXM-IRC21

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- day mode: filter QB21(1.2mm thickness)