

## Compact CWDM Mux/Demux Module

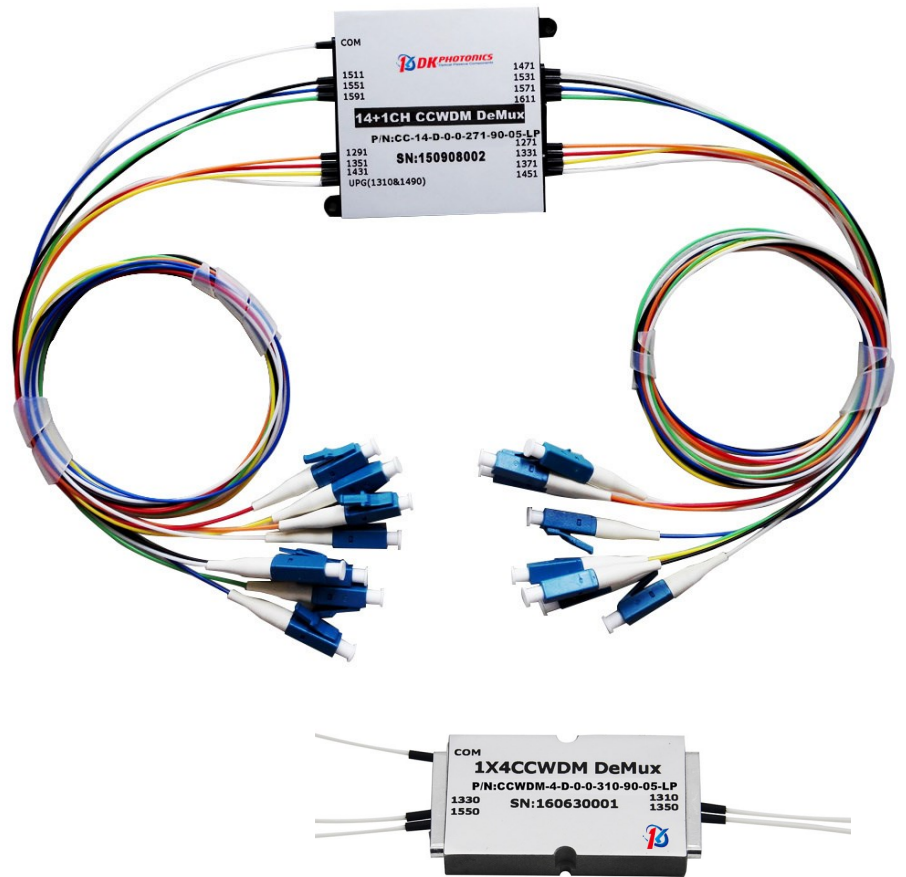
DK Photonics offers a Mini CWDM (compact CWDM) module that provides bandwidth capacity expansion for future network growth in one of the industry's smallest packages. The compact CWDM modules are based on free space optics technology. It is available in 4-or up to 18- channel configurations. It has lower overall insertion loss and better uniformity across the channels. Its compact size and unique carrier tray set it apart, making it easier to deploy in a variety of field situations.

### Key Features

- Compact Size
- High Reliability
- Low Insertion Loss and Better Uniformity
- Ultra High Thermal Stability
- Epoxy-Free in Optical Path
- Protocol Transparent
- Simple to install and use

### Applications

- CWDM System
- CATV System
- Network upgrading



## For more Info

Please contact us at:

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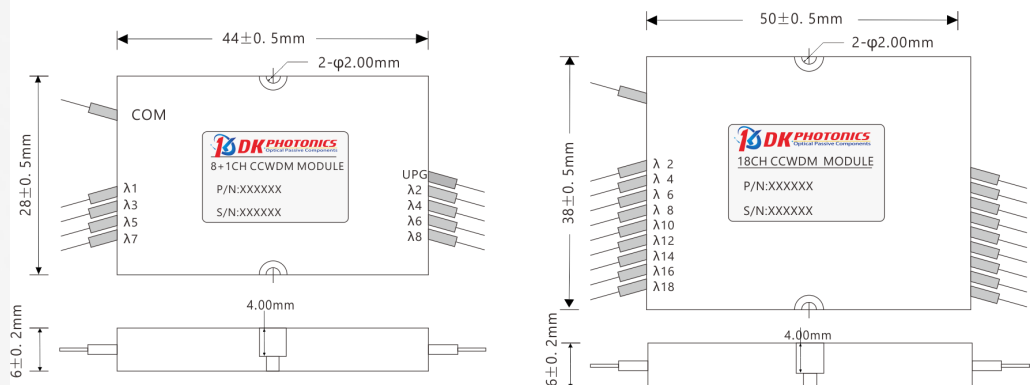
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Add.:

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Shenzhen, China 518109

### Package Dimension:



\*Due to ongoing design improvements, the package size is subject to change. Please contact DK Photonics for confirmation if you have special requirements.

## Compact CWDM Mux/Demux Module

### Performance Specifications

| Parameter                    | Unit             | Values                                 |                                       |      |      |      |
|------------------------------|------------------|--|---------------------------------------|------|------|------|
| Channel Number               | CH               | 4                                      | 8                                     | 12   | 18   |      |
| Central Wavelength           | nm               | 1270, 1290...1610 or 1271, 1291...1611 |                                       |      |      |      |
| Passband                     | Channels         | nm                                     | +/-6.5                                |      |      |      |
|                              | Express Port     | nm                                     | 1310+/-50, or 1260~1457, or 1462~1620 |      |      |      |
| Insertion Loss               | Channels         | dB                                     | <1.0                                  | <1.8 | <2.8 | <3.5 |
|                              | Mux              | Adjacent Channel                       | dB                                    | >15  |      |      |
|                              |                  | Non-adjacent Channel                   | dB                                    | >15  |      |      |
| Isolation                    | Adjacent Channel | dB                                     | >30                                   |      |      |      |
|                              | Demux            | Non-adjacent Channel                   | dB                                    | >40  |      |      |
|                              |                  | Upgrade port                           | dB                                    | >15  |      |      |
| Ripple in Pass-band          | dB               | <0.5                                   |                                       |      |      |      |
| Directivity                  | dB               | >50                                    |                                       |      |      |      |
| Polarization Dependent Loss  | dB               | <0.20                                  |                                       |      |      |      |
| Polarization Mode Dispersion | ps               | <0.20(GD)                              |                                       |      |      |      |
| Return Loss                  | dB               | >45                                    |                                       |      |      |      |
| Fiber Type                   | -                | Corning G657A1                         |                                       |      |      |      |
| Power Handling               | mW               | <500                                   |                                       |      |      |      |
| Operating Temperature        | °C               | -10~70(or -40~85)                      |                                       |      |      |      |
| Storage Temperature          | °C               | -40~85                                 |                                       |      |      |      |
| Package Dimension            | 4~8CH            | mm                                     | (L)44.0x(W)28.0x(H)6.0                |      |      |      |
|                              | 10~18CH          | mm                                     | (L)50.0x(W)38.0x(H)6.0                |      |      |      |

1.The above specification is without connector.

2. IL is 0.3 dB higher and RL is 5 dB lower for each connector added.

### Order information

P/N: CCWDM-①-②-③-④-⑤-⑥-⑦-⑧

When you inquire, please provide the correct P/N number according to our ordering information, and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250μm bare fiber pigtail.

| ①                       | ②           | ③          | ④                     | ⑤           | ⑥                 | ⑦            | ⑧          |
|-------------------------|-------------|------------|-----------------------|-------------|-------------------|--------------|------------|
| Channel                 | Module Type | Package    | Operating Temperature | 1st Channel | Pigtails Diameter | Fiber Length | Connector  |
| 4: 4 Channel            | M:Mux       | 0:Standard | 0: -10~70°C           | 270:1270nm  | 25:250μm bare     | 05:0.5m      | 00: None   |
| 8: 8 Channel            | D:DeMux     | 1:Special  | 1: -30~70°C           | 271:1271nm  | fiber             | 10:1.0m      | FP: FC/PC  |
| 4+1: 4+ Express Channel |             |            | 2: -40~85°C           | ...         | 90:900μm loose    | 15:1.5m      | FA: FC/APC |
| 8+1:8+ Express Channel  |             |            |                       | 510:1510nm  | tube              | XX: Others   | SP: SC/PC  |
| 18+1:18+Express Channel |             |            |                       | 531:1531nm  | XX: Others        |              | SA: SC/APC |
|                         |             |            |                       |             |                   |              | LP: LC/PC  |
|                         |             |            |                       |             |                   |              | LA: LC/APC |
|                         |             |            |                       |             |                   |              | X: Others  |

**Part Number Example:** CCWDM-8-M-0-0-471-90-05-LP

**Description:** 8 channels Compact CWDM Mux Module,1471~1611nm, without Express port, standard package, operating temperature from -10 to 70 °C, with 0.9mm OD loose tube,0.5m length fiber pigtails, LC/PC connectors at all ports.

### Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.