

DUAL WINDOWS, SINGLE MODE WINDBAND TREE/STAR COUPLER (NXM)

DWTC Series

Product Description

Oplink's Dual window, single mode wideband tree and star couplers are high port count bi-directional products with excellent performance over two wide wavelength bands. They have very good uniformity, low excess loss and very low polarization sensitivity. All devices are tested according to industry standard test procedures and are supplied with all pertinent measurement data.

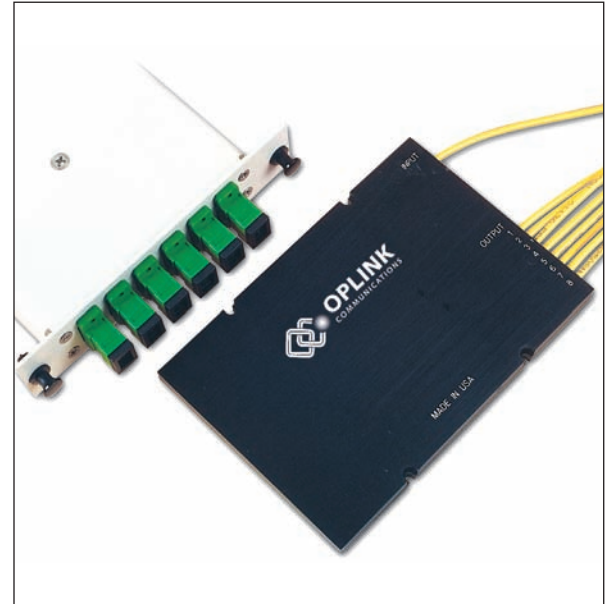
Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module or subsystem.

Features

- ◆ Best Uniformity
- ◆ Ultra Low Insertion Loss
- ◆ High Directivity
- ◆ Highly Stable & Reliable

Applications

- ◆ Telecommunications
- ◆ CATV Fiberoptic Links
- ◆ Fiber Amplifier System
- ◆ Fiberoptic Instruments



Performance Specification

| DWTC Series (NxM) | Nx4 | Nx5 | Nx6 | Nx8 | Nx16 | Nx32 | Nx40 | Unit |
|----------------------------------|-------------------------------------|---------|---------|-----------|---------------------------------------|-----------|-----------|------|
| Standard Configuration | N=1,2,4 | N=1 | N=1,2 | N=1,2,8 | N=1,2,16 | N=1,2 | N=1,2 | |
| Grade | P/A | P/A | P/A | P/A | P/A | P/A | P/A | |
| Operating Wavelength Range | 1270~1350 / 1510~1590 | | | | | | | nm |
| Insertion Loss (Max) | 7.2/7.6 | 8.5/9.0 | 9.2/9.6 | 10.8/11.0 | 14.4/14.7 | 18.0/18.4 | 19.5/20.0 | dB |
| Uniformity (Max) | 1.2/1.5 | 1.4/1.8 | 1.6/2.0 | 1.8/2.2 | 2.4/2.8 | 3.0/3.5 | 3.5/4.0 | dB |
| Polarization Dependent Loss | <0.3 | <0.3 | <0.4 | <0.5 | <0.5 | <0.6 | <0.6 | dB |
| Directivity | > 55 | | | | | | | dB |
| Maximum Power Handling | 500 | | | | | | | mW |
| Operating Temperature | 0 to +70 | | | | | | | °C |
| Storage Temperature | -40 to +85 | | | | | | | °C |
| Package Dimension ^[2] | Refer packaging choices table | | | | | | | mm |
| | P1 : 100.0 (L) x 80.0 (w) x 7.0(H) | | | | P3 : 160.0 (L) x 110.0 (w) x 11.0 (H) | | | |
| | P2 : 130.0 (L) x 90.0 (w) x 9.0 (H) | | | | P4 : 210.0 (L) x 160.0 (w) x 13.0 (H) | | | |

[1] The maximum IL is under all states of polarization and within the full operating temperature and wavelength ranges specified, does not include contribution from connectors.

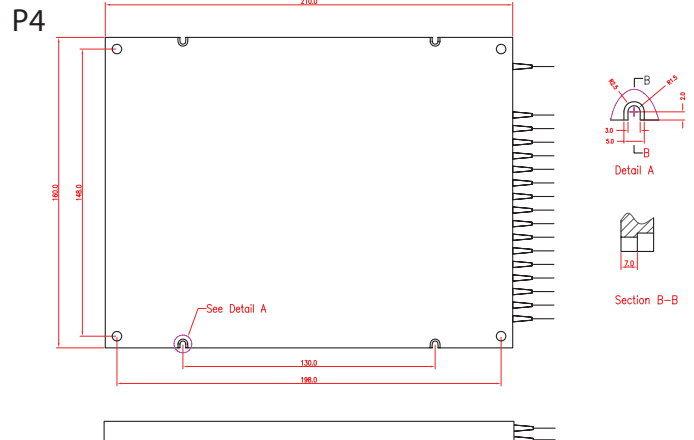
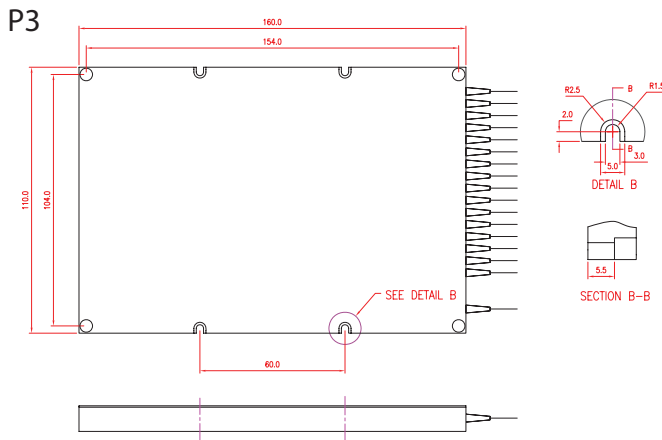
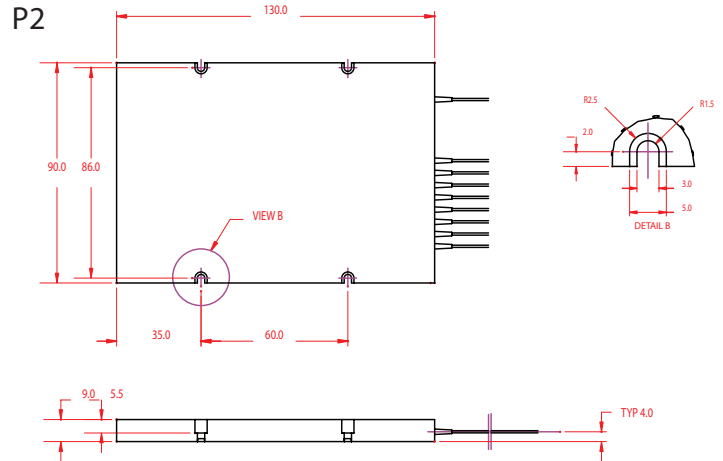
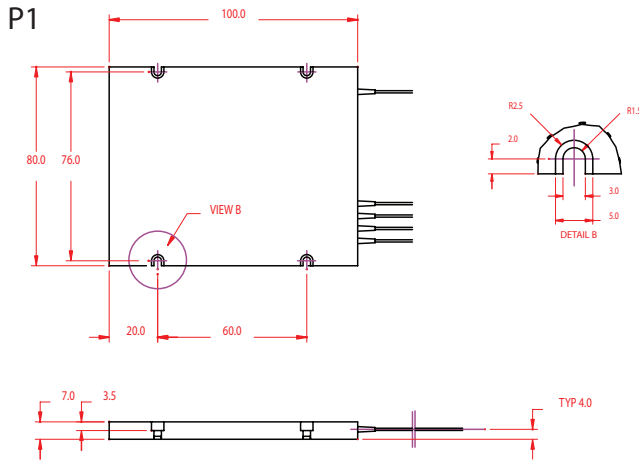
[2] The mechanical tolerance should be +/-0.2 mm on all package dimensions unless otherwise custom specified.

Packaging Choices Table

| SWTC (NxM) | Nx4 | Nx5 | Nx6 | 1x8 | 2x8 | 8x8 | 1x16 | 2x16 | 16x16 | 1x32 | 2x32 | 1x40 | 2x40 |
|-------------------|-----|-----|--------|--------|--------|-----|------|------|-------|------|------|------|------|
| Packaging Choices | P1 | P1 | P1, P2 | P1, P2 | P1, P2 | P2 | P3 | P3 | P4 | P4 | P4 | P4 | P4 |

Mechanical Drawing / Package Dimensions (dimension in mm)

Notes: The fibre holes only for referece



Ordering Information

Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.

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| | | | | | |
|---------------------------------------|---|--|---|---|---|
| Wavelength 1 = 1310/1550 nm | Type 14 = 1x4 15 = 1x5 16 = 1x6 18 = 1x8 1A = 1x16 1B = 1x32 1C = 1x40 24 = 2x4 26 = 2x6 28 = 2x8 2A = 2x16 2B = 2x32 2C = 2x40 44 = 4x4 88 = 8x8 AA = 16x16 | Grade P = P grade A = A grade | Package Type [4] 1 = P1 2 = P2 3 = P3 4 = P4 | Fiber Length [3] H = 0.5 meter 1 = 1.0 meter 5 = 1.5 meter 2 = 2.0 meter | Connector Type 1 = None 2 = FC/PC 3 = FC/SPC 4 = FC/APC 5 = SC/PC 6 = SC/SPC 7 = SC/APC 8 = ST 9 = LC/UPC A = MU B = LC/APC |
|---------------------------------------|---|--|---|---|---|

Fiber Type
2 = SMF-28 with 900µm loose tube
3 = SMF-28 with 3mm cable

[3] The tolerance of fiber length is +/-0.1m. 1 meter is standard. The lead time for special fiber length will be longer.
[4] Refer package table for packaging choices