



COMCAST

OSP xWDM Ordering Guide

Amphenol 
Broadband Solutions®



DWDM Specifications

| Parameter | Value |
|-----------------------|----------------------|
| Operating Wavelengths | ITU-T Grid |
| Channel Spacing | 0.8nm (ITU 100GHz) |
| Power Handling | 300mW |
| Connector Type | LC or SC; UPC or APC |
| Operating Temperature | -40 to +85°C |
| Storage Temperature | -40 to +85°C |

CWDM Specifications

| Parameter | Value |
|-------------------------|------------------------|
| Center Wavelength Range | 1271 to 1611nm (ITU-T) |
| Wavelength Spacing | 20nm |
| Power Handling | 300mW |
| Connector Type | LC or SC; UPC or APC |
| Operating Temperature | -40 to +85°C |
| Storage Temperature | -40 to +85°C |

CWDM Available Center Wavelengths

| Code | λ | Code | λ | Code | λ |
|------|-----------|------|-----------|------|-----------|
| 27 | 1271 | 39 | 1391 | 51 | 1511 |
| 29 | 1291 | 41 | 1411 | 53 | 1531 |
| 31 | 1311 | 43 | 1431 | 55 | 1551 |
| 33 | 1331 | 45 | 1451 | 57 | 1571 |
| 35 | 1351 | 47 | 1471 | 59 | 1591 |
| 37 | 1371 | 49 | 1491 | 61 | 1611 |

DWDM ITU-T Grid

| Channel | Wavelength | Channel | Wavelength |
|---------|------------|---------|------------|
| 12 | 1567.95 | 39 | 1546.12 |
| 13 | 1567.13 | 40 | 1545.32 |
| 14 | 1566.31 | 41 | 1544.53 |
| 15 | 1565.50 | 42 | 1543.73 |
| 16 | 1564.68 | 43 | 1542.94 |
| 17 | 1563.86 | 44 | 1542.14 |
| 18 | 1563.05 | 45 | 1541.35 |
| 19 | 1562.23 | 46 | 1540.56 |
| 20 | 1561.42 | 47 | 1539.77 |
| 21 | 1560.61 | 48 | 1538.98 |
| 22 | 1559.79 | 49 | 1538.19 |
| 23 | 1558.98 | 50 | 1537.40 |
| 24 | 1558.17 | 51 | 1536.61 |
| 25 | 1557.36 | 52 | 1535.82 |
| 26 | 1556.55 | 53 | 1535.04 |
| 27 | 1555.75 | 54 | 1534.25 |
| 28 | 1554.94 | 55 | 1533.47 |
| 29 | 1554.13 | 56 | 1532.68 |
| 30 | 1553.33 | 57 | 1531.90 |
| 31 | 1552.52 | 58 | 1531.12 |
| 32 | 1551.72 | 59 | 1530.33 |
| 33 | 1550.92 | 60 | 1529.55 |
| 34 | 1550.12 | 61 | 1528.77 |
| 35 | 1549.32 | 62 | 1527.99 |
| 36 | 1548.51 | 63 | 1527.22 |
| 37 | 1547.72 | 64 | 1526.44 |
| 38 | 1546.92 | 65 | 1525.66 |

Amphenol offers a complete line of outside plant (OSP) passives for use in a wide range of optical network architectures.

The product family includes optical passives ranging from 4 to 40 channel counts. They can be configured with optional express, upgrade, and test ports to support a variety of applications. The packaging comes in two forms, the HiDT (channel counts 8 or less) and the OSP AOM (channel counts 12 and higher), both providing stable optical performance across a wide operating temperature range for OSP deployment.

Amphenol OSP passive products are available in kits with accessories to facilitate installation into FOSC® A/B/C/D enclosures.

Features

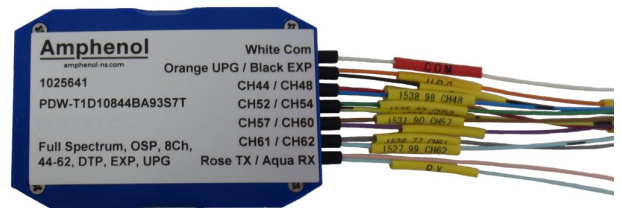
- Color coded fibers and wavelength labels on each fiber provide easy identification
- Upgrade port for pass through wavelengths
- Dual test ports (Tx and Rx) and express ports
- Single end fiber ports for easy routing and splicing
- 900um fiber leads

Applications

- Metro Ethernet
- HFC / Fiber Deep

Channel Count <= 8

| Application | Description |
|---------------|-----------------------|
| FOSC C/D Tray | HiDT + Module Adapter |



HiDT



Module Adapter

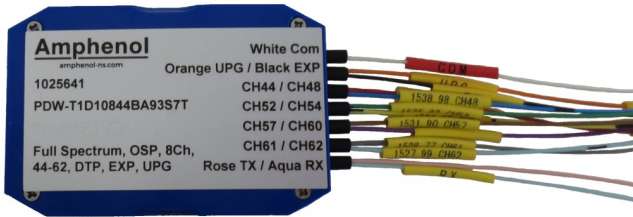


HiDT mounted on FOSC D Tray

FOSC® is a registered trademark of CommScope

Channel Count <= 8

| Application | Description |
|------------------|--------------------------------------|
| FOSC A/B Closure | HiDT + Medium Splice Tray with Hinge |



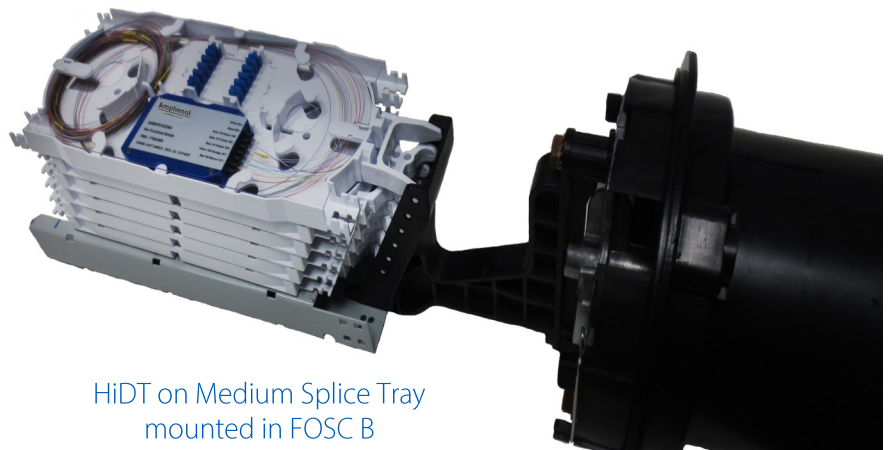
HiDT



Medium Splice Tray with Hinge



HiDT on Medium Splice Tray with Hinge



HiDT on Medium Splice Tray
mounted in FOSC B

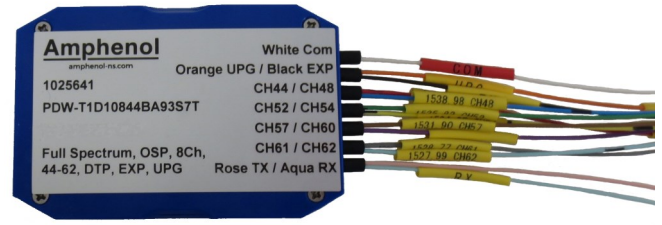
FOSC® is a registered trademark of CommScope

FOSC® D Slack Basket Installation:

The HiDT on Medium Splice Tray can also be installed into the FOSC D slack basket area by using the D Tower Hinge.

Channel Count <= 8

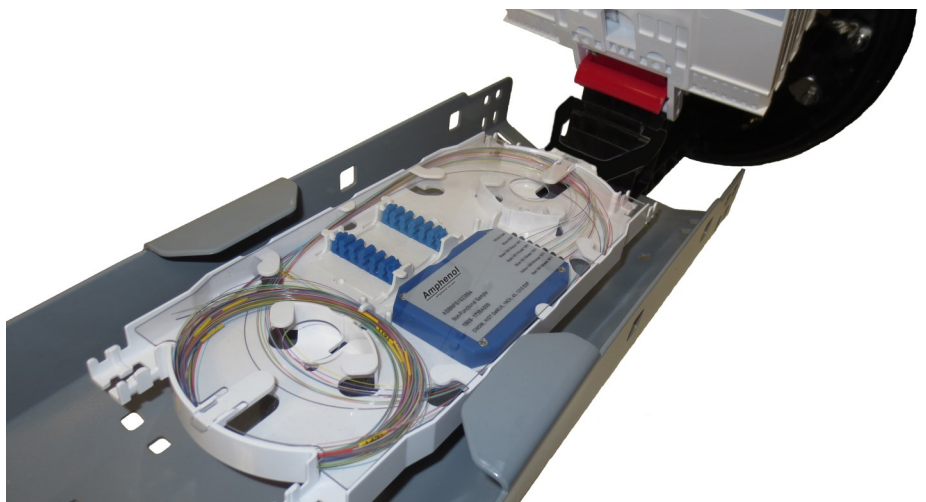
| Application | Description |
|------------------|---|
| FOSC C/D Closure | HiDT + Medium Splice Tray + D Tower Hinge |



HiDT



Medium Splice Tray + D Tower Hinge



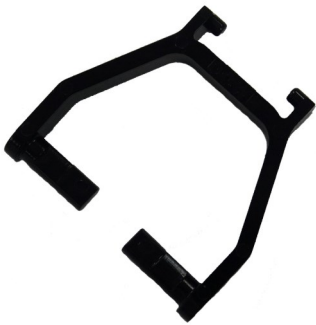
HiDT on Medium Splice Tray with D Tower Hinge mounted in FOSC D Slack Basket

FOSC® is a registered trademark of CommScope

| CIFA | Description | Part Number |
|--------|---|-------------|
| 300147 | Accessory Kit—(1) Medium Splice Tray with A/B Hinge, (1) D Tower Hinge, and (1) D Tray Cradle Adapter | 1027596 |



Medium Splice Tray with A/B Hinge
(Included with Kit)



D Tower Hinge
(Included with Kit)



D Tray Cradle Adapter
(Included with Kit)

Channel Count ≥ 8

| Application | Description |
|----------------|--|
| FOSC B Closure | OSP AOM + Tray Bracket + B Hinge |
| FOSC D Closure | OSP AOM + Tray Bracket + D Tower Hinge |



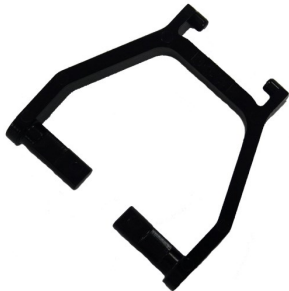
OSP AOM



B Hinge



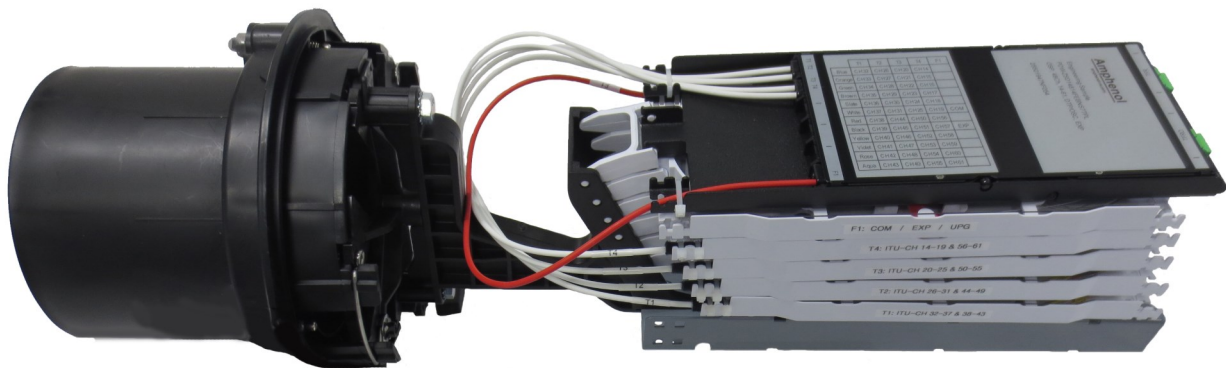
Tray Bracket + B Hinge



D Tower Hinge



Tray Bracket + D Tower Hinge



OSP AOM with Tray Bracket and Hinge Installed in FOSC-B

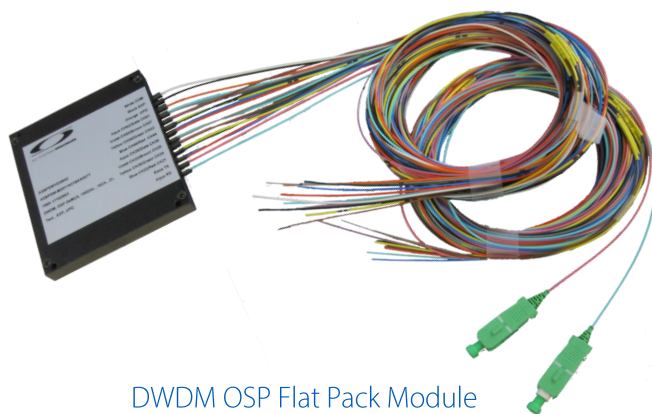
FOSC® is a registered trademark of CommScope

Amphenol Broadband Solutions offers a family of flat pack modules for a wide range of DWDM applications.

The Flat Pack modules have integrated mounting features and fiber ports exiting one end of the package.

The compact lightweight design provides a rugged package with high port count and component capacity that delivers improved density in field deployment applications.

This Dense Wave Division Multiplex (DWDM) module can be supplied as a 12, 16, 20, and 40 channel format with various channel plans.



DWDM OSP Flat Pack Module

Features:

- Four mounting holes enabling installation versatility
- Color coded fibers and wavelength labels on each fiber provide easy identification, when applicable.
- Test leads are terminated with SC/APC connectors
- Single end fiber ports for easy routing and splicing
- Dual test ports (Tx and Rx)
- Express and upgrade ports
- 900um fiber leads

This solution delivers efficient and scalable network services for business customers within a specific metropolitan region. It utilizes a Dense Wavelength Division Multiplexing (DWDM) architecture with standard channel counts of 4, 8, 20 and 40.

| CIFA | Buffer Type | Channel Range | Description | Product Type | Part Number |
|---------------------------|-------------|---------------|--|--------------|-------------|
| CWDM 8 Channel | | | | | |
| 92681 | 900um | 1431-1611 | CWDM - TYPE A, HiDT, 8ch, 1431-1611, DTP, DWDM EXP, SC/APC test ports only, 900um, 3mtr | HiDT | 1023366 |
| DWDM 12 Channel | | | | | |
| 92715 | 900um | 50-61 | DWDM, OSP, 12ch, 50-61, DTP, EXP, UPG, SC/APC test ports only, 3mtr | Flatpack | 1025076-50 |
| DWDM 16 Channel | | | | | |
| 92716 | 900um | 25-40 | DWDM, OSP 16ch, 25-40, DTP, EXP, UPG, SC/APC test ports only, 3mtr | Flatpack | 1025077-25 |
| DWDM 4 Channel | | | | | |
| 92802 | 900um | 20-23 | DWDM, HiDT, 4ch, 20-23, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-20 |
| 92803 | 900um | 24-27 | DWDM, HiDT, 4ch, 24-27, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-24 |
| 92804 | 900um | 28-31 | DWDM, HiDT, 4ch, 28-31, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-28 |
| 92805 | 900um | 32-35 | DWDM, HiDT, 4ch, 32-35, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-32 |
| 92806 | 900um | 36-39 | DWDM, HiDT, 4ch, 36-39, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-36 |
| 92807 | 900um | 40-43 | DWDM, HiDT, 4ch, 40-43, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-40 |
| 92808 | 900um | 44-47 | DWDM, HiDT, 4ch, 44-47, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-44 |
| 92809 | 900um | 48-51 | DWDM, HiDT, 4ch, 48-51, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-48 |
| TBD | 900um | 52-55 | DWDM, HiDT, 4ch, 52-55, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-52 |
| TBD | 900um | 56-59 | DWDM, HiDT, 4ch, 56-59, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1026185-56 |
| DWDM 8 Channel | | | | | |
| 92719 | 900um | 20-27 | DWDM, HiDT, 8ch, 20-27, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1025624-20 |
| 92720 | 900um | 28-35 | DWDM, HiDT, 8ch, 28-35, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1025624-28 |
| 92722 | 900um | 36-43 | DWDM, HiDT, 8ch, 36-43, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1025624-36 |
| 92723 | 900um | 44-51 | DWDM, HiDT, 8ch, 44-51, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1025624-44 |
| 92724 | 900um | 52-59 | DWDM, HiDT, 8ch, 52-59, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1025624-52 |
| TBD | 900um | 25-32 | DWDM, HiDT, 8ch, 25-32, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1025624-25 |
| 92721 | 900um | 33-40 | DWDM, HiDT, 8ch, 33-40, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1025624-33 |
| DWDM 20 Channel | | | | | |
| 92814 | 900um | 20-39 | DWDM, OSP, 20ch, 20-39, DTP, EXP, UPG, SC/APC all ports, 1mtr | Flatpack | 1026225-20 |
| 92815 | 900um | 40-59 | DWDM, OSP, 20ch, 40-59, DTP, EXP, UPG, SC/APC all ports, 1mtr | Flatpack | 1026225-40 |
| 300149 | 250um | 20-39 | DWDM, OSP AOM, 20ch, 20-39, DTP, EXP, UPG, SC/APC test ports only, 2 mtr, Tray Mounted Kit | OSP AOM | 1027580-20 |
| 300150 | 250um | 40-59 | DWDM, OSP AOM, 20ch, 40-59, DTP, EXP, UPG, SC/APC test ports only, 2 mtr, Tray Mounted Kit | OSP AOM | 1027580-40 |
| DWDM 40 Channel | | | | | |
| 92816 | 900um | 20-59 | DWDM, OSP, 40ch, 20-59, DTP, EXP, UPG, SC/APC all ports, 1mtr | Flatpack | 1026227 |
| 300146 | 250um | 20-59 | DWDM, OSP AOM, 40ch, 20-59, DTP, EXP, UPG, SC/APC test ports only, 2 mtr, Tray Mounted Kit | OSP AOM | 1027581 |
| HiDT Accessory Kit | | | | | |
| 300147 | | | Accessory Kit—(1) Medium Splice Tray with A/B hinge, (1) D Tower Tray Hinge, and (1) D Tray Cradle Adapter | | 1027596 |

This Hybrid Fiber Coax (HFC) solution pushes fiber deeper into the access network to provide higher bandwidth and more scalable services to both residential and enterprise applications. The Full Spectrum DWDM architecture is used with standard channel counts of 4, 8, and 16.

| CIFA | Buffer Type | Channel Range | Description | Product Type | Part Number |
|--------------------------------------|-------------|--|---|--------------|-------------|
| DWDM Full Spectrum 4 Channel | | | | | |
| 92810 | 900um | 21, 22, 24, 26 | DWDM, Full Spectrum, HiDT, 4ch, DTP, EXP, UPG, SC/APC test ports only, 3mtr, channels 21, 22, 24, 26 | HiDT | 1026192-C6 |
| 92812 | 900um | 28, 33, 36, 39 | DWDM, Full Spectrum, HiDT, 4ch, DTP, EXP, UPG, SC/APC test ports only, 3mtr, channels 28, 33, 36, 39 | HiDT | 1026192-CC |
| 92811 | 900um | 44, 48, 52, 54 | DWDM, Full Spectrum, HiDT, 4ch, DTP, EXP, UPG, SC/APC test ports only, 3mtr, channels 44, 48, 52, 54 | HiDT | 1026192-CB |
| 92813 | 900um | 57, 60, 61, 62 | DWDM, Full Spectrum, HiDT, 4ch, DTP, EXP, UPG, SC/APC test ports only, 3mtr, channels 57, 60, 61, 62 | HiDT | 1026192-CD |
| DWDM Full Spectrum 8 Channel | | | | | |
| 92728 | 900um | 21, 22, 24, 26, 28, 33, 36, 39 | DWDM, Full Spectrum, HiDT, 8ch, DTP, EXP, UPG, SC/APC test ports only, 3mtr, channels 21, 22, 24, 26, 28, 33, 36, 39 | HiDT | 1025640 |
| 92729 | 900um | 44, 48, 52, 54, 57, 60, 61, 62 | DWDM, Full Spectrum, HiDT, 8ch, DTP, EXP, UPG, SC/APC test ports only, 3mtr, channels 44, 48, 52, 54, 57, 60, 61, 62 | HiDT | 1025641 |
| DWDM Full Spectrum 16 Channel | | | | | |
| 300148 | 250um | 21, 22, 24, 26, 28, 33, 36, 39, 44, 48, 52, 54, 57, 60, 61, 62 | DWDM, Full Spectrum, OSP AOM, 16ch, DTP, EXP, UPG, SC/APC test ports only, 2mtr, 250um, channels 21, 22, 24, 26, 28, 33, 36, 39, 44, 48, 52, 54, 57, 60, 61, 62, Tray Mounted Kit | OSP AOM | 1027579-CH |
| BWDM | | | | | |
| 93395 | 900um | 21-39, 44-62 | BWDM, HiDT, 2 bands, 21-39, 44-62, SC/APC all ports, 900um, 1 mtr | HiDT | 1027014 |
| HiDT Accessory Kit | | | | | |
| 300147 | | | Accessory Kit—(1) Medium Splice Tray with A/B hinge, (1) D Tower Hinge, and (1) D Tray Cradle Adapter | | 1027596 |

EPON is an all IP fiber-only network that utilizes passive optical splitters with various split ratios from 1x2 up to 1x32. This architecture has a Dense Wavelength Division Multiplexing (DWDM) overlay with a standard channel count of 8 or 16.

| CIFA | Buffer Type | Channel Range | Description | Product Type | Part Number |
|--------------------------------------|-------------|----------------|--|--------------|---------------|
| DWDM 8 Channel | | | | | |
| 92719 | 900um | 20-27 | DWDM, HiDT, 8ch, 20-27, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1025624-20 |
| 92720 | 900um | 28-35 | DWDM, HiDT, 8ch, 28-35, DTP, EXP, UPG, SC/APC test ports only, 3mtr | HiDT | 1025624-28 |
| DWDM 16 Channel | | | | | |
| TBD | 900um | 20-35 | DWDM, OSP, 16ch, 20-35, DTP, EXP, UPG, SC/APC test ports only, 3mtr | Flatpack | 1025077-20 |
| CIFA | Split Ratio | Connector Type | Description | Product Type | Part Number |
| Optical Splitters - Tray Kits | | | | | |
| 34606 | 1x2 | None | 1x2 FBT Splitter, 250um 2mtr fiber pigtails, no connectors plus MF module, and tray adapter | Discrete | ASBPSP1026401 |
| 34607 | 1x4 | None | 1x4 PLC Splitter, 250um 2mtr fiber pigtails, no connectors plus MF module, and tray adapter | Discrete | 1026386 |
| 34608 | 1x8 | None | 1x8 PLC Splitter, 250um 2mtr fiber pigtails, no connectors plus MF module, and tray adapter | Discrete | ASBPSP1026387 |
| 34609 | 1x16 | None | 1x16 PLC Splitter, 250um 2mtr fiber pigtails, no connectors plus MF module, and tray adapter | Discrete | ASBPSP1026388 |
| 34610 | 1x32 | None | 1x32 PLC Splitter, 250um 2mtr fiber pigtails, no connectors plus MF module, and tray adapter | Discrete | 1026389 |

Remote PHY 4.0

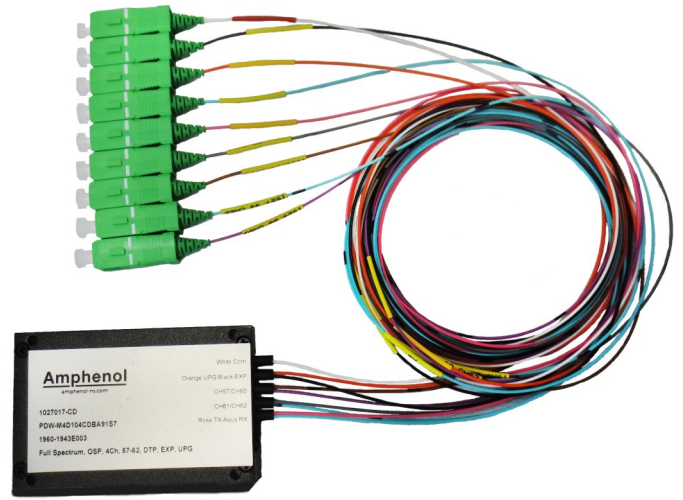
The Remote PHY 4.0 solution replaces the analog forward link with a digital (IP) forward path service to the fiber node resulting in a higher performance and more efficient Ethernet network. It utilizes a Dense Wavelength Division Multiplexing (DWDM) architecture between the Headend and Remote PHY node (RPN) with standard channel counts of 12, 24, 36, and 48.

| CIFA | Description | Product Type | Part Number |
|--------|---|--------------|-------------|
| 173150 | OSP V4, 48CH 14-61, Fiber ITU COM AUX, SCA TPFR TPFRO, O/E Plan, Single AOM Kit | OSP AOM | 1027683K |
| 173152 | OSP V4, 36CH 26-61, Fiber ITU COM AUX, SCA TPFR TPFRO, O/E Plan, Single AOM Kit | OSP AOM | 1027684K |
| 173154 | OSP V4, 24CH 38-61, Fiber ITU COM AUX, SCA TPFR TPFRO, O/E Plan, Single AOM Kit | OSP AOM | 1027685-38K |
| 173155 | OSP V4, 24CH 14-37, Fiber ITU COM AUX, SCA TPFR TPFRO, O/E Plan, Single AOM Kit | OSP AOM | 1027685-14K |
| 173158 | OSP V4, 12CH 50-61, Fiber ITU COM AUX, SCA TPFR TPFRO, O/E Plan, Single AOM Kit | OSP AOM | 1027686-50K |
| 173159 | OSP V4, 12CH 38-49, Fiber ITU COM AUX, SCA TPFR TPFRO, O/E Plan, Single AOM Kit | OSP AOM | 1027686-38K |
| 173160 | OSP V4, 12CH 26-37, Fiber ITU COM AUX, SCA TPFR TPFRO, O/E Plan, Single AOM Kit | OSP AOM | 1027686-26K |
| 173161 | OSP V4, 12CH 14-25, Fiber ITU COM AUX, SCA TPFR TPFRO, O/E Plan, Single AOM Kit | OSP AOM | 1027686-14K |

Amphenol offers a family of flatpack “Node Packs” for a wide range of DWDM applications. The Node Packs have integrated mounting features and fiber ports exiting one end of the package. The 900um fiber leads allow for custom connector terminations.

The compact, lightweight design provides a rugged package with high port count and component capacity that delivers improved density in field deployment applications.

These modules can be supplied with channel counts ranging from 4ch to 8ch and having a variety of different channel plans.



Node Pack

Features

- Four mounting holes enabling installation versatility
- Easy identification with color coded fibers and wavelength labels
- All ports are terminated with SC/APC connectors
- Single end fiber ports for easy routing
- Dual test ports (Tx and Rx)
- Express and upgrade ports
- 900um fiber leads

HFC Applications

| CIFA | Description | Application | Part Number |
|------------------|--|-------------|-------------|
| 4 Channel | | | |
| 93387 | DWDM, FS, OSP, 4ch, DTP, EXP, UPG, SC/APC, 1mtr, channels 21, 22, 24, 26 | Node | 1027017-C6 |
| 93388 | DWDM, FS, OSP, 4ch, DTP, EXP, UPG, SC/APC, 1mtr, channels 28, 33, 36, 39 | Node | 1027017-CC |
| 93389 | DWDM, FS, OSP, 4ch, DTP, EXP, UPG, SC/APC, 1mtr, channels 44, 48, 52, 54 | Node | 1027017-CB |
| 93390 | DWDM, FS, OSP, 4ch, DTP, EXP, UPG, SC/APC, 1mtr, channels 57, 60, 61, 62 | Node | 1027017-CD |
| 8 Channel | | | |
| 93391 | DWDM, FS, OSP, 8ch, DTP, EXP, UPG, SC/APC, 1mtr, channels 21, 22, 24, 26, 28, 33, 36, 39 | Node | 1027018-C2 |
| 93392 | DWDM, FS, OSP, 8ch, DTP, EXP, UPG, SC/APC, 1mtr, channels 44, 48, 52, 54, 57, 60, 61, 62 | Node | 1027018-CA |

Contact your local ABS representative for more information - [Click here](#).