

**PASSIVE DWDM SYSTEM** 

V1.0

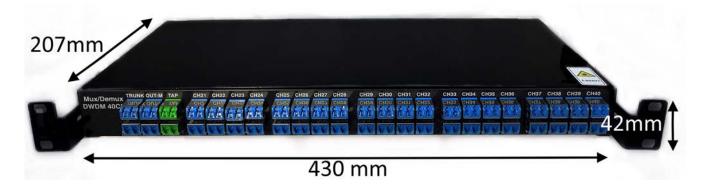
The DWDM passive Mux Demux modules deliver the benefits of a Dense Wave Division Multiplexer in a fully passive solution. They are designed for, point to point, Man and long-haul transmission, where wavelengths are packed tightly together over the C-band range of wavelengths, up to 40 wavelengths in 100GHz grid(0.8nm) ITU G.694.1 standard and Telcordia GR1221, GR1209, CE, RoHS, FCC are compliant. Our DWDM Mux Demux are modular, scalable and are perfectly suited to transport PDH, SDH / SONET, ETHERNET services over DWDM in optical metro edge and access networks.



## **Product features**

- Standard 1U rackmount design, fully front panel wiring, with 3 pluggable service card slots, 1 network management card or service card
- Multiplexing of 40 channels on fiber pair
- Low insertion loss
- Unique design with all adaptors with auto shutter to protect against dust and also operators
- 1U 19" low profile modular design
- LC/UPC connectors for channel and Trunk
- Compliant to ITU G.694.1, 100GHz ITU gird, 0.8 nm spacing
- · High quality thin film filter technology
- Passive, no electricity needed (MTBF ca. 400 years)
- Available with 1310nm large spectrum port (1270nm 1350nm) for grey 1310nm channel
- 1% TAP available in TX and RX mode, for channel level monitoring
- OTDR 1625nm and 1650nm port available, for on line monitoring of the fiber pair.

## **Layout and Dimensions**





DWDM-1U-40CH DWDM SYSTEM

**Product specifications** 

arameter	Description, values
<ul> <li>Operating Channel</li> </ul>	40 channels C21-C60 (DWDM ports)
<ul> <li>Channel Spacing</li> </ul>	100 GHz (0.8nm)
<ul> <li>Adjacent Channel Isolation</li> </ul>	> 30dB
<ul> <li>Insertion Loss</li> </ul>	3.5dB
Non-adjacent Channel Isolatio	n > 40dB
<ul> <li>Operating Return Loss</li> </ul>	> 45dB
<ul> <li>Directivity</li> </ul>	> 50dB
<ul> <li>Polarization Dependent Loss</li> </ul>	< 0.15dB
<ul> <li>Channel Uniformity</li> </ul>	< 1.4dB Max
<ul> <li>Optical Power</li> </ul>	< 500mW
<ul> <li>Operating Temperature</li> </ul>	: -5°C~ +75°C
Storage Temperature	: -40°C~ +80°C

## **ITU Channel Guiding**

ITU Channel	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Wavelength (nm)	1560.61	1559.79	1558.98	1558.17	1557.36	1556.55	1555.75	1554.94	1554.13	1553.33	1552.52	1551.72	1550.92	1550.12	1549.32	1548.51	1547.72	1546.92	1546.12	1545.32
ITU Channel	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Wavelength (nm)	1544.53	1543.73	1542.94	1542.14	1541.35	1540.56	1539.77	1538.98	1538.19	1537.40	1536.61	1535.82	1535.04	1534.25	1533.47	1532.68	1531.90	1531.12	1530.33	1529.55

## **Ordering Information**

Reference	Description
DWDM-1U-40CH	19" 1U Chassis passive multiplexer DWDM A-thermal. 40 opticals channels colored Lambda, spacing 100GHz, 40 connectors LC/UPC duplex to 2 DWDM fiber G.657A1, duplex LC/UPC. Allow 40 duplex channel

