AN-CWDM-MUX modular access system

AN-CWDM-MUX modular access system dramatically saves dark fiber rental costs by multiplexing various traffic streams and protocols like 10/100/1000 Ethernet, E1, STM-1/4/16 and CATV using CWDM technology over same fiber.

DESCRIPTION

AN-CWDM-MUX modular access system is designed to transmit multi-protocol signal one same fiber between 2 end points. The whole system is supported by AN-CWDM-MUX series chassis and CWDW-M series Module cards. From 2 to 16 different signal streams between 2 points can be transmitted by one or a pair of fiber. AD-net's AN-CWDM-MUX series CWDM devices can effectively replace layout of optical cables, which improves bandwidth utilization at a low cost.

It is applicable to the construction of short and medium-distance IP broadband Metropolitan Area Networks (MANS) and access networks, especially applicable to network carriers who:

1) cannot lay optical cables conveniently;
2) rent optical cables;
3) do not have sufficient optical cables;
4) want to improve the bandwidth utilization of optical cables.

AN-CWDM-MUX series devices are developed on the basis of CWDM technology, through which multiple wavelength channels with a wavelength interval of 20nm are multiplexed into one or a pair of fibers to implement signal transmission.

It can be used in point-to-point and point-to-multipoint application, and can also work with wavelength routers. With the application of non-cooling laser technology and EDFA technology, it has great cost advantage in building broadband MANS and access networks.

It can provide interfaces for multiple data formats, such as E1, Fast Ethernet, Gigabit Ethernet, STM-1/4/16 interfaces and fiber channels.

External interface: Interface for out signal input; interface type can be RJ45 or fiber port, connecting with switches and fiber optical converters etc, to implement signal input.

Internal interface: CWDM signal conversion port; output signal wavelengths are CWDM wave band (1470nm-1610nm), easy for multiplexing and output.
COM: Multiplexing signal output port, a port for signal output after multiplexing; interface type is SC.

Models are available in following configurations:
AN-CWDM-MUX4S single-fiber 4 channels bidirectional concourse
AN-CWDM-MUX8D dual-fiber 8 channels bidirectional concourse
AN-CWDM-MUX8S single-fiber 8 channels bidirectional concourse
AN-CWDM-MUX16D dual-fiber 16 channels bidirectional concourse

FEATURES
Protocol: Seamless connection with Ethernet, SDH networks and fiber channels over same fiber;
Rate: 10Mbps-1.25Gbps adaptive, 2.5G optical module;
Extensible: 2-16 wave channels (optional);
Network topology: point-to-point, point-to-multipoint;
Fiber access: single mode, multi mode;
Twisted-pair access: 10Base-T, 100Base-TX, 1000Base-T;
Power supply: AC220V and DC-48V;
19-inch chassis structure, convenient for installation and use;
A maximum of 16-channel transmitting/receiving optical signals can be multiplexed to a pair of
fibers for transmission;
Open structure, supporting inter-connection and utilized together with other manufacturers’
devices.
Maximum capacity: 16 channels with dual fiber dark fiber
Both topologies - Point to Point & Point to Multipoint supported
Only 3U high
20 km 40km 60km 80km 110km distances as a ordering options

SPECIFICATIONS

Internal Optical Interface

Central wavelength:

1270nm | 1290nm | 1310nm | 1330nm | 1350nm | 1370nm | 1430nm | 1450nm
1470nm | 1490nm | 1510nm | 1530nm | 1550nm | 1570nm | 1590nm | 1610nm

Channel spacing: 20nm
Optical pass bandwidth: +/- 6 nm
Temperature drift of central wavelength: 0.08nm +/- 0.1nm/°C
Transmitted optical power: -10dBm +/-3dBm
Received optical power: -24dBm +/-3dBm
Optical receiving pass band: 1270nm - 1610nm
LOS alarm power at receive end: -25dBm -30dBm
Receiving sensitivity: < -20dBm
Maximum input power: 0dBm -+6dBm
Connector: SC/LC/FC

External interface

Connector: SC/LC/FC
Standard for optical interfaces: 100BASE-FX, 1000BASE-FX, STM-1/4/16 fiber ports are supported
Wavelength's for above: 850nm; 1310nm; 1550nm
Fiber: Single-mode or multi-mode fiber
Twisted-pair electrical interface: RJ45
Twisted-pair interface standard: 10Base-T, 100Base-TX, 1000Base-T

Operating environment

Temperature & Humidity: 0 ~ 45, 10 ~ 90 non-condensing
**Storage environment**

Temperature & Humidity: -40 ~ 45, 10 ~ 90 non-condensing

**Power supply**

AC power: 90 ~ 260V, 50~60Hz  
DC power: -36 ~-72V  
Power consumption: <70W

Dimensions: 440mm×220mm×132mm

**Application scenario:**

![Diagram](image)

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<tbody>
<tr>
<td>AN-CWDM-MUX4S</td>
<td>4 bidirectional channels over single fiber single mode, DC or AC</td>
</tr>
<tr>
<td>AN-CWDM-MUX8D</td>
<td>8 bidirectional channels over dual fiber single mode, DC or AC</td>
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<td>AN-CWDM-MUX8S</td>
<td>8 bidirectional channels over single fiber single mode, DC or AC</td>
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<tr>
<td>AN-CWDM-MUX16D</td>
<td>16 bidirectional channels over dual fiber single mode, DC or AC</td>
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Haberleşme sistemlerinde yüksek performansı yakalayın