



DWDM System



DWDM systems is the high speed and large capacity transmission system. With 48 transmission channel in maximum, the speed rate can reach 40 Gbit/s in a single channel, and the total capacity can be 1920Gbit/s. DWDM can fully met the requirement of telcom operator in super Rack-type DWDM System Outline, 2U+1U, 19"

large capacity and long distant transmission, offer a firm platform for the transmission in multi-service and the upgrade for the network in the future. It is the best solution for the shortage of fiber cable at present.

DWDM Transmission System (2U+1U)

2U+1U rack-type DWDM equipment adopts the flexible expanding framework, supports modular on-line upgrade. It is easy to expand the capacity and maintain the system. By network management function in in-band and out-band, it is easy to manage. With various service interface, flexible configuration, economic network structure and stable operating, this system can effectively meet the demand of the large transmission capacity in the MAN in new period.



2U Rack-type DWDM System

Functional Feature

- ◆ **Large capacity:** By the single-mode optical fiber cable used at present, the speed rate of a single channel in DWDM can reach 40G, with total capacity in 1920G.
- ◆ **Flexible topological structure:** point to point; point to multi-points; chain; ring etc.
- ◆ **Various service transparent access:** It supports the services such as Ethernet, PDH, SDH, CATV and professional network, compatible with the speed rate of 155M, 1.25G, 2.5G, 10G, 40G.
- ◆ **Different transmission distance:** transmission distance without relay can be 30km, 40km, 80km, 100km, 120km etc. It can make long-distance transmission with relay.
- ◆ **Good expandability:** The Channel of DWDM can be expanded to 48.
- ◆ **1+1 backup system protection:** the optical switching time $\leq 30\text{ms}$ ensure the safety and stability of transmission route.
- ◆ **1+1 backup system for heat redundancy of power supply:** Activer WDM device offer dual-power 1+1 backup system for heat redundancy, power supply supports hot-plugging, AC/DC optional.
- ◆ **Open structure:** it supports customer service access, compatible with the equipment of various manufactures. It supports the client equipment of single-mode(1310nm/1550nm), multi-mode (850nm/1310nm), RJ45 etc. It realizes the function of OADM, the mid-side node can wave rise and fall freely.
- ◆ **Strong network management function:** It adopts SNMP-based graphical interface and supports in-band and out-band management. The network adopts an embedded operating system and has a real-time monitoring and controlling function. The form of management is flexible and varied. The graphical user interface is friendly.



Technical parameter

System Parameter		Technical Index
Max Capacity		16-channel(16X10G),32-channel(32X10G), 40-channel(40X10G),48-channel(48X10G)
Wavelength Range		- Compliant with standard of ITU-I G.694.1-
Access Service Type		PDH , ATM STM-256/STM-64/STM-16/STM-4/STM-1 OC-768/OC-192/OC-48/OC-12/OC-3 FE, GE, 10GE FICON/ESCON/FIBER Channel/CATV
Transmission Mode at Optical Interface		Adopts 2R transmission mode, each channel supporting transparent transmission at a rate below 2.5Gbit/s. Adopts 3R transmission mode, each channel supports the rate such as 155Mbit/s, 622Mbit/s, 1.25Gbit/s, 2.5Gbit/s, and 10Gbit/s, 40Gbits (Optional).
Topological Structures		Point to point; point to multi-points; chain; ring; single fiber Bidirectional
Optical Fiber Type		G.652 G.653 G.655
Network Management Mode		CLI, TELNET, SNMP,WEB
Dimension	2U OUT card	25 (W) X 88 (H) X 116 (D) (mm)
	1U passive chassis	440 (W) × 44 (H) × 230 (D) (mm)
	2Uchassis	428 (W) × 88 (H) × 322 (D) (mm)
Environment Requirement	Operating temperature	-10℃ ~ 60℃
	Storage temperature	-40℃ ~ 80℃
	Relative Humidity	5% ~ 95% (non-condensing)
Power Supply(Standard)		220 V/AC, 50Hz; -48 V/DC (optional)
Safety and EMC		Compliant with FCC、UL、CE、TUV、CSA
Consumption		≤85W (10G DWDM≤150W)



Ordering information

DW-TS	X	XX	XX	X	X	X	X	X
	System structure	Data rate	Channel Number	Transmission Type	Transmission distance	Customer port	Network Management	Power supply
Transmission System	1 = 1U	0 = 155M	04 = 4channel	1 =Dual-fiber/ Bi-directional	1 = 30KM	1=single mode LC	1 = yes	1 = dual-AC
	2 = 2U+1U	1 = 1.25G	08 = 8channel	2 = Single-fiber/ bi-directional	2 = 50KM	2=multi-mode LC	2 = no	2 = dual-DC
	3 = 3U+1U	2 = 2.5G	16 = 16channel	3 = single-fiber, unidirectional	3 = 80KM	3 = RJ45		3 = AC/DC
	5 = 5U+1U	3 = 10G	48 = 48channel		4 = 100KM	X = order		X = order
		4 = 40G	XX=order		5 = 120KM			

DW-OC	X	X	X	XX	CXX
	Speed Ratio	Transmission Distance	Customer Port	Wavelength Reshaping	First Wavelength
2U OTU Card	1 = 2R/155M	1 = 30KM	1 = single-modeLC	1R= Without Wavelenth Reshaping (Standard)	27 = 1270nm (1270~1610)
	2 = 2R/1.25G	2 = 50KM	2 = multi-modeLC	3R= With Wavelenth Reshaping	XX=Customize
	3 = 2R/2.5G	3 = 80KM	3 = RJ45		
	4 = 3R/155M	4 = 100KM	X = order		
	5 = 3R/1.25G	5 = 120KM			
	6 = 3R/2.5G	X = order			
	8 = 10G				
	9 = 40G				
	X=order				