I. Integrated Transmission System

Vispace 1000 series products are a new generation of optical network platform with large capacity and multi-service access launched by Visint®. The platform has the characteristics of high business integration, high port density, rich business types and flexible configuration. It also supports SNMP-based C/S architecture graphical management interface, which provides a very clear fault location for management and maintenance and saves maintenance cost. It is widely used in telecommunication, radio and television, power, education, cloud computing and information security, etc. It is oriented to all-optical network and applied to the construction of national, inter-provincial and intra-provincial trunk lines, local metropolitan area network and various special networks. The platform has the characteristics of independent and transparent transmission signals, combined transmission of multi-channel signals, saving optical fiber resources, safety and reliability, and can help customers set up a network with long-distance, high reliability, safety and flexibility, disaster-resistant optical transmission which is the best solution to cope with the shortage of optical cable resources.

1. Integrated Transmission System (1U)

Product Introduction

Vispace 1000 Series 1U integrated transmission equipment is highly integrated and small. It adopts 19 inch standard 1U rack to provide 1+1 redundant backup of power (AC/DC optional), and is easy to install and use. 1U integrated transmission equipment can provide up to 4 service slots, supports different service cards to mix and insert and hot swapping, supports in-band and out-of-band network management; selects each channel bandwidth according to needs to meet different needs of customers; remote online upgrades, maintainability.

Figure 1: 1U Integrated Transmission Equipment

Visint

Guangzhou Visint Communication Technology Co., LTD.
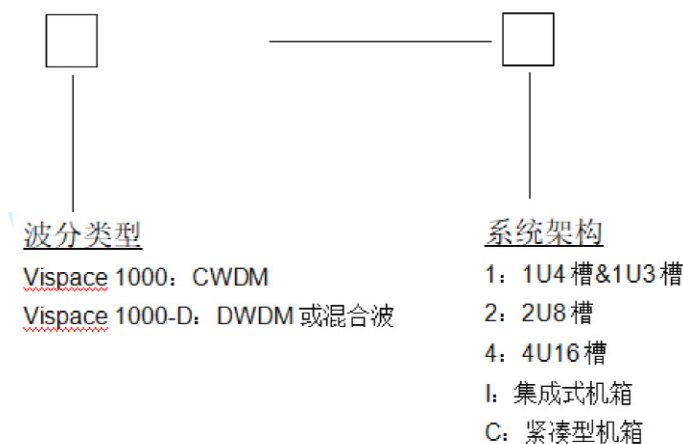
http://www.visint-telecom.com

Product Feature

◆Flexible networking, occupies less space, and super expansibility.

◆Supporting CWDM/DWDM/EDFA/OLPS/OTAP and other business cards hot-swapping mode.

◆Supporting SDH/SONET/POS/EPON/GPON/CPRI/SAN/ETHERNET service access at various rates.

◆Supporting single-fiber unidirectional, single-fiber bidirectional, dual-fiber bidirectional chain, star and ring types and other networking methods.

◆Supporting client access from different vendors, interconnecting with devices from multiple vendors, supporting client devices as single mode (1310nm/1550nm), multi-mode (850nm/1310nm), electrical port (RJ45), etc., can realize OADM optical add-drop multiplexing function, and intermediate nodes can be up and down wavelength.

◆Supporting SNMP-based unified network management platform, the network management methods include CLI, WEB, NetRiver (graphical interface).

◆Supporting 1 + 1 power hot swapping redundant backup, AC and DC power supply is optional.

Product Specification

System Parameter	Technical Index
Maximum capacity of single system	4, 8 and 16 waves.
Wavelength range	Compliance with ITU-T G.692, ITU-T G.695 standard.
Service access types	PDH, EPON, GPON. SDH: STM-1/STM-4/STM-16/STM-64/STM-256. SONET: OC-3/OC-12/OC-48/OC-192/OC-768, FE, GE, 10GE, 40GE, 100GE, CPRI 1~7, POS, FICON, ESCON, CATV.
Optical port transmission mode	Adopts 2R transmission mode, each channel supports 32M~111.81Gbit/s rate transparent transmission; Adopts 3R transmission mode, each channel supports155Mbit/s, 622Mbit/s, 1.25Gbit/s, 2.488Gbit/s, 4GFC, 8GFC, 10GFC, 11.3Gbit/s, 40Gbis/s, 100Gbis/s rate. (Optional).
Physical network topology	Chain type, Star type and Ring type.
Fiber type	G.652, G.653 (not recommended), G.655.
Network management mode	CLI, NetRiver, WEB.

Product dimension	482(W)*44(H)*285(D)(mm).	
Environmental requirements	Working temperature	-10℃ ~ 70℃.
	Storage temperature	-40℃ ~ 80℃.
	Relative humidity	5% ~ 95% no condensation.
Power supply requirements (standard value)	220V/AC, 50Hz; -48V/DC (optional).	
Safety and EMC	Compliance with FCC, UL, CE, TUV, CSA standards.	
Power consumption	<120W.	

Ordering Information:

波分类型
Vispace 1000：CWDM
Vispace 1000-D：DWDM 或混合波

系统架构
1：1U4 槽&1U3 槽
2：2U8 槽
4：4U16 槽
I：集成式机箱
C：紧凑型机箱

2. Integrated Transmission System (2U)

Product Introduction

Vispace 1000 Series 2U integrated transmission equipment is highly integrated and small. It adopts 19 inch standard 2U rack to provide 1+1 redundant backup of power (AC/DC optional), and is easy to install and use. 2U integrated transmission equipment can provide up to 8 service slots, support different service cards to mix and insert and hot swap, support in-band and out-of-band network management; select each channel bandwidth according to needs to meet different needs of customers; remote online upgrade , maintainability.

Figure 2: 2U Integrated Transmission Equipment

Tel: +86-2082072838   **Fax:** +86-2082072818   **Skype:** gzkevin_lee
WhatsApp: +8613435696077   **Web:** www.visint-telecom.com   **Email:** kevin@visint.com.cn

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Product Feature

◆Flexible networking, occupies less space, and super expansibility.

◆Supporting CWDM/DWDM/EDFA/OLPS/OTAP and other business cards hot-swapping mode.

◆Supporting SDH/SONET/POS/EPON/GPON/CPRI/SAN/ETHERNET service access at various rates.

◆Supporting single-fiber unidirectional, single-fiber bidirectional, dual-fiber bidirectional chain, star and ring types and other networking methods.

◆Supporting client access from different vendors, interconnecting with devices from multiple vendors, supporting client devices as single mode (1310nm/1550nm), multi-mode (850nm/1310nm), electrical port (RJ45), etc., can realize OADM optical add-drop multiplexing function, and intermediate nodes can be up and down wavelength.

◆Supporting SNMP-based unified network management platform, the network management methods include CLI, WEB, NetRiver (graphical interface).

◆Supporting 1 + 1 power hot swapping redundant backup, AC and DC power supply is optional.

Product Specification

System Parameter	Technical Index
Maximum capacity of single system	4, 8, 16 and 40 waves.
Wavelength range	Compliance with ITU-T G.692, ITU-T G.695 standards.
Service access types	PDH, EPON, GPON. SDH: TM-1/STM-4/STM-16/STM-64/STM-256. SONET: OC-3/OC-12/OC-48/OC-192/OC-768, FE, GE, 10GE, 40GE, 100GE, CPRI 1~7, POS, FICON, ESCON, CATV.
Optical port transmission mode	Adopts 2R transmission mode, each channel supports 32M~111.81Gbit/s rate transparent transmission. Adopts 3R transmission mode, each channel supports155Mbit/s, 622Mbit/s, 1.25Gbit/s, 2.488Gbit/s, 4GFC, 8GFC, 10GFC, 11.3Gbit/s, 40Gbis/s, 100Gbis/s rate. (Optional).
Physical network topology	Chain type, Star type and Ring type.
Fiber type	G.652, G.653 (not recommended), G.655.
Network management mode	CLI, NetRiver, WEB.
Product dimension	482(W)*89(H)*285(D)(mm).

Environmental requirements	Working temperature	-10℃ ~ 70℃.
	Storage temperature	-40℃ ~ 80℃.
	Relative humidity	5% ~ 95% no condensation.
Power supply requirements (standard value)	220V/AC, 50Hz; -48V/DC (optional).	
Safety and EMC	Compliance with FCC, UL, CE, TUV, CSA standard.	
Power consumption	<200W.	

Ordering Information:

波分类型
Vispace 1000：CWDM
Vispace 1000-D：DWDM 或混合波

系统架构
1：1U4 槽&1U3 槽
2：2U8 槽
4：4U16 槽
I：集成式机箱
C：紧凑型机箱

3. Integrated Transmission System (4U)

Product Introduction

Vispace 1000 Series 4U integrated transmission equipment is highly integrated and small. It adopts 19 inch standard 4U rack to provide 1+1 redundant backup of power (AC/DC optional), and is easy to install and use. 4U integrated transmission equipment can provide up to 16 service slots, support different service cards to mix and insert and hot swap, support in-band and out-of-band network management; select each channel bandwidth according to needs to meet different needs of customers; remote online upgrade , maintainability.
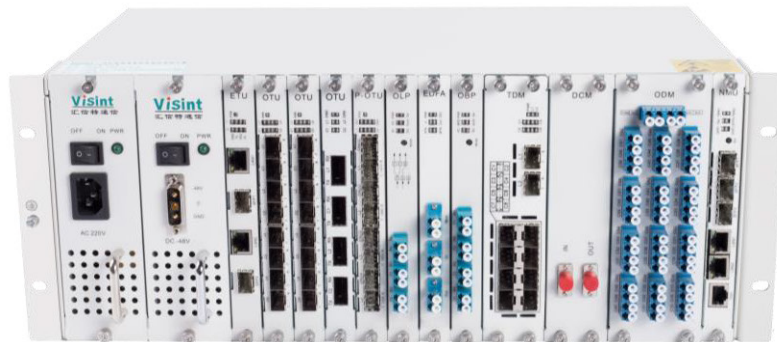

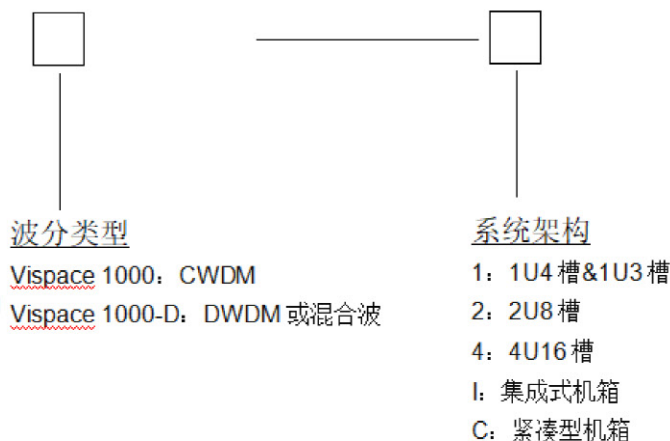Figure 3: 4U Integrated Transmission Equipment

Product Feature

◆Flexible networking, occupies less space, and super expansibility.

◆Supporting CWDM/DWDM/EDFA/OLPS/OTAP and other business cards hot-swapping mode.

◆Supporting SDH/SONET/POS/EPON/GPON/CPRI/SAN/ETHERNET service access at various rates.

◆Supporting single-fiber unidirectional, single-fiber bidirectional, dual-fiber bidirectional chain, star and ring types and other networking methods.

◆Supporting client access from different vendors, interconnecting with devices from multiple vendors, supporting client devices as single mode (1310nm/1550nm), multi-mode (850nm/1310nm), electrical port (RJ45), etc., can realize OADM optical add-drop multiplexing function, and intermediate nodes can be up and down wavelength.

◆Supporting SNMP-based unified network management platform, the network management methods include CLI, WEB, NetRiver (graphical interface).

◆Supporting 1 + 1 power hot swapping redundant backup, AC and DC power supply is optional.

Product Specification

System Parameter	Technical Index
Maximum capacity of single system	4, 8, 16, 40, 48, 80 and 96 waves.
Wavelength range	Compliance with ITU-T G.692, ITU-T G.695 standards.
Service access types	PDH, EPON, GPON, SDH: STM-1/STM-4/STM-16/STM-64/STM-256 SONET: OC-3/OC-12/OC-48/OC-192/OC-768, FE, GE, 10GE, 40GE, 100GE, CPRI 1~7, POS, FICON, ESCON, CATV.
Optical port transmission mode	Adopts 2R transmission mode, each channel supports 32M~111.81Gbit/s rate transparent transmission; Adopts 3R transmission mode, each channel supports155Mbit/s, 622Mbit/s, 1.25Gbit/s, 2.488Gbit/s, 4GFC, 8GFC, 10GFC, 11.3Gbit/s, 40Gbis/s, 100Gbis/s rate. (Optional).
Physical network topology	Chain type, Star type and Ring type.
Fiber type	G.652, G.653 (not recommended), G.655.
Network managment mode	CLI, NetRiver, WEB.
Product dimension	482 (W)*177(H)*250(D)(mm).

Environmental requirements	Working temperature	-10℃ ~ 70℃.
	Storage temperature	-40℃~ 80℃.
	Relative humidity	5% ~ 95% no condensation.
Power supply requirements (standard value)	220V/AC, 50Hz; -48V/DC (optional).	
Safety and EMC	Compliance with FCC, UL, CE, TUV, CSA standard.	
Power consumption	<300W.	

Ordering Information:

波分类型
Vispace 1000：CWDM
Vispace 1000-D：DWDM 或混合波

系统架构
1：1U4槽&1U3槽
2：2U8槽
4：4U16槽
I：集成式机箱
C：紧凑型机箱

II. Dispersion Compensation Series

1. Fixed Dispersion Compensation Card (DCM)

Product Introduction

DCM Fixed Dispersion Compensation card is a new type of single-mode fiber designed by Visint® to solve the problem of fiber dispersion in high-speed and long-distance communication systems. It is used for dispersion compensation of G.652 & G.655 standard single-mode fiber. The DCM features slope compensation, which enables wideband dispersion slope compensation in the C-band for standard single-mode fiber (G.652), which optimizes system residual dispersion. It is based on a proven and reliable fiber optic process that enhances the performance of optical transmission systems with a dispersion range of -10 to -2100 ps/nm at 1550 nm wavelength, and can provide products with special requirements for central wavelength and dispersion.

Figure 4: Fixed Dispersion Compensation Card (DCM)

Product Feature

◆ Low insertion loss, low polarization mode dispersion.

◆ Broadband dispersion compensation for DWDM systems.

◆ G.652 fiber C-band 100% slope compensation (standard value).

◆ Performance index had passed Telcordia GR-2854-CORE.

◆ Reliability had passed Telcordia GR-2854-CORE.

◆ Different packaging styles, connector types and jumper lengths are available.

◆ Supporting SNMP-based unified network management platform, network management mode CLI, WEB, NetRiver (graphical interface).

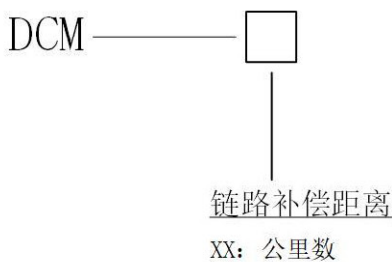## Product Specification

System Parameter	Technical Index				
Dispersion compensator @1545nm (Ps/nm)	20Km	40Km	60Km	80Km	100Km
	-340±20	-670±20	-1000±20	-1340±20	-1680±20
Relative dispersion @1545nm (Nm-1)	0.0036±20 %(general), 0.0036±10 %(senior).				
Insertion loss@1525-1565nm(dB)	≤3	≤4.8	≤6	≤7.6	≤8.8
Insertion loss (typical)@1525-1565nm(dB)	≤2.8	≤4.4	≤5.8	≤7.2	≤8.4
Polarization mode dispersion(ps)	≤0.7	≤0.8	≤0.9	≤1.0	≤1.1
Polarization mode dispersion (typical)(ps)	0.2	0.3	0.4	0.5	0.6
Polarization dependent loss(dB)	≤0.1.				
Brillouin scattering threshold(dBm)	Minimum value: 6.				
Nonlinear system(n2/Aeff)	Maximum value: $1.4*10-9$.				
Effective area(Aeff)	Minimum value: 20.				

Network management mode	CLI, NetRiver, WEB.	
Product dimension	177 (W)*20(H)*225(D)(mm).	
Environmental requirements	Working temperature	-10℃ ~ 70℃.
	Storage temperature	-40℃ ~ 80℃.
	Relative humidity	5% ~ 95% no condensation.
Safety and EMC	Compliance with FCC, UL, CE, TUV, CSA standards.	
Power consumption	<2W.	

Note: The dispersion compensation boards of different distances will be different in size.

Ordering Information:

DCM ——————☐

链路补偿距离
XX：公里数

2. Tunable Dispersion Compensation (TDC)

Product Introduction

TDC is an electric tunable dispersion compensation module developed by Visint® for high-speed transmission systems. Accurate dispersion compensation based on the principle of temperature-controlled dispersion compensation fiber output. It can be used for 10G/40G/100G long-distance optical communication transmission system and data center interconnection, with long-distance compensation, high output accuracy and low insertion loss, low phase jitter, low group delay jitter, low PDL and PMD.

Figure 5: Tunable Dispersion Compensation Card (TDC)

Tel: +86-2082072838   **Fax:** +86-2082072818   **Skype:** gzkevin_lee
WhatsApp: +8613435696077   **Web:** www.visint-telecom.com   **Email:** kevin@visint.com.cn

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Product Feature

◆Low insertion loss, low polarization mode dispersion.

◆High dispersion compensation and the compensation distance can reach 60KM.

◆The optical signal line is transparent and does not change the optical signal.

◆Broadband dispersion compensation for DWDM systems.

◆Supporting SNMP-based unified network management platform, network management mode CLI, WEB, NetRiver (graphical interface).

Product Specification

System Parameter	Technical Index	
Dispersion compensation range	±700nm or ±1360nm.	
Operating wavelength	C&C+ Band (1528.97nm~1567.13nm).	
Channel spacing	50 GHZ or 100 GHZ.	
Positive dispersion accuracy	±25 Ps/nm or ±60 Ps/nm.	
Insertion loss	＜4dB.	
Return loss	50dB.	
Polarization dependent loss	0.1dB.	
Maximum input power	27dBm.	
Maximum power	＜4.5W.	
Network management mode	CLI, NetRiver, WEB.	
Product dimension	177 (W)*20(H)*225(D)(mm).	
Environmental requirements	Working temperature	-10℃ ~ 70℃.
	Storage temperature	-40℃ ~ 80℃.
	Relative humidity	5% ~ 95% no condensation.
Safety and EMC	Compliance with FCC, UL, CE, TUV, CSA standards.	
Power consumption	<10W.	

Ordering Information:

TDC —— □

系统接口类型

L：LC接口
S：SC接口
F：FC接口