

2010

PRODUCT GUIDE

**ePHOTON**

Optical Module for Telecom  
and Datacom

Shenzhen ePhoton Technology Co., Ltd

# Contents

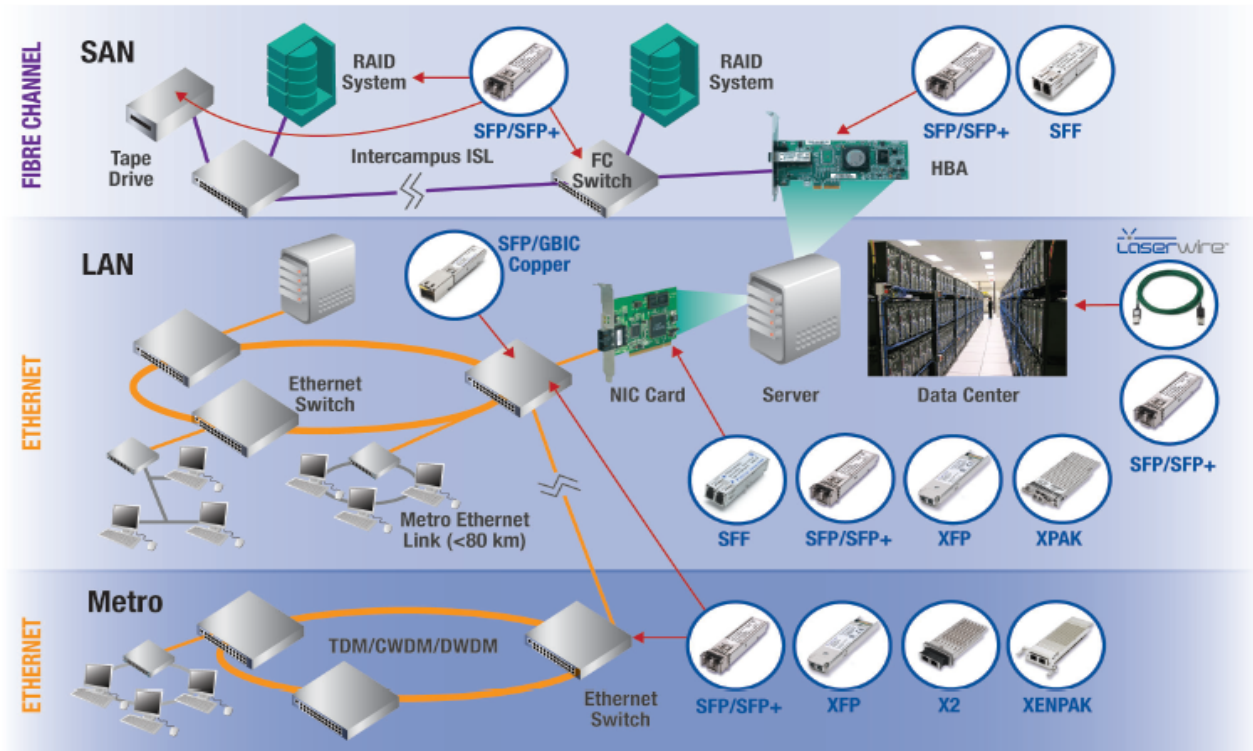
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## Introduction

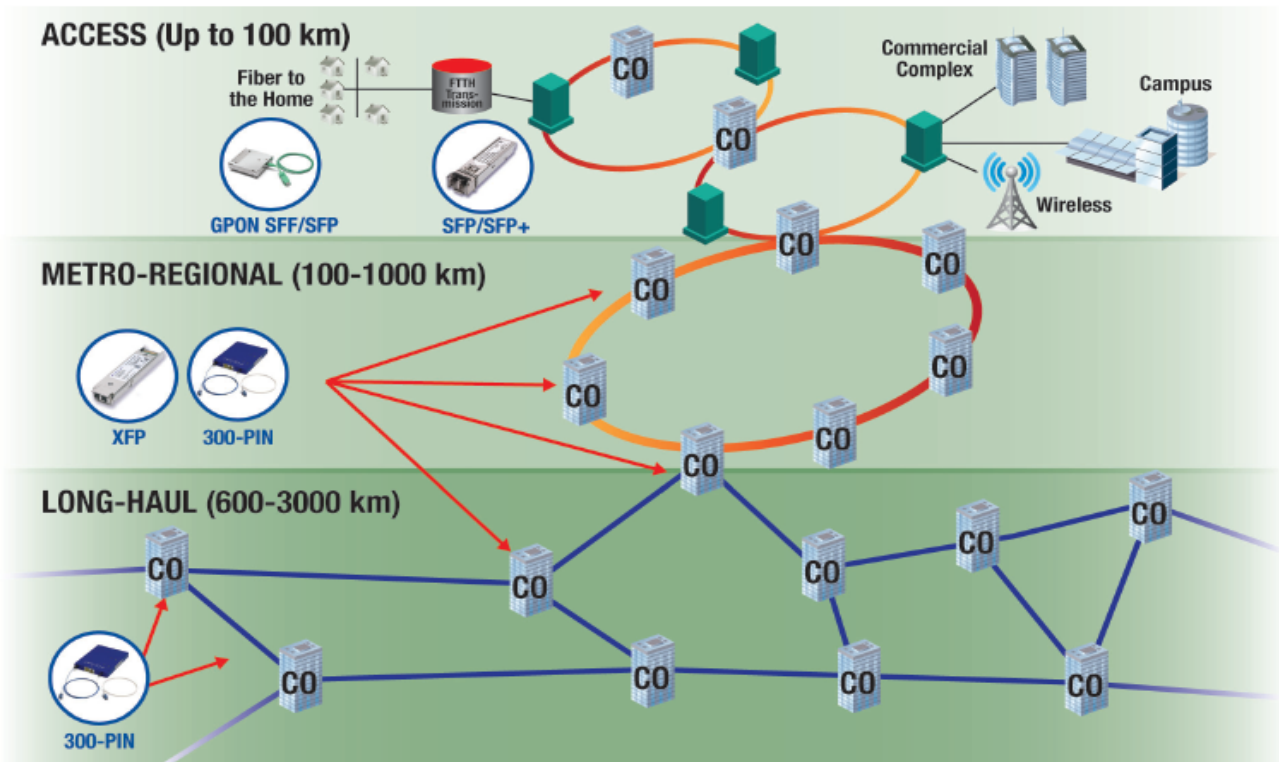
Broad Product selection and innovative technology have made ePhoton the optical module manufacturer of choice for most major networking equipment vendors worldwide.

ePhoton's optical communication products are compliant with Ethernet, Fibre Channel, SONET/SDH and WDM standards and operate at data rates from 100Mb/s to 10Gb/s for datacenter, access, metro-regional, and long haul networks, They feature outstanding performance over extended voltage and temperature ranges, while minimizing jitter, electromagnetic interference(EMI) and power dissipation.

## EXAMPLE OF A DATACOM NETWORK DIAGRAM



## EXAMPLE OF A TELECOM NETWORK DIAGRAM



1X9 SC OC3/STM1 SDH Optical Transceiver						
	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ETR9155-31AR1*	OC3/STM1 S1.1	155Mb/S	15Km	1310nm	Dual SC
2	ETR9155-31LR1*	OC3/STM1 L1.1	155Mb/S	40Km	1310nm	Dual SC
3	ETR9155-55LR2*	OC3/STM1 L1.2	155Mb/S	80Km	1550nm	Dual SC
4	ETR9155-55X2*	OC3/STM1 X1.2	155Mb/S	120Km	1550nm	Dual SC

1X9 SC OC12/STM4 SDH Optical Transceiver						
	Part Number	Application	Data Rate	Reach	Wave22length	Connector
1	ETR9622-31AR1*	OC12/STM4 S4.1	622Mb/S	15Km	1310nm	Dual SC
2	ETR9622-31LR1*	OC12/STM4 L4.1	622Mb/S	40Km	1310nm	Dual SC
3	ETR9622-55LR2*	OC12/STM4 L4.2	622Mb/S	80Km	1550nm	Dual SC

1X9 SC OC24 SONET/GE/FC Optical Transceiver						
	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ETR91G-31LE*	GE,LE	1.25Gb/S	20Km	1310nm	Dual SC
2	ETR91G-31EX*	GE,EX	1.25Gb/S	40Km	1310nm	Dual SC
3	ETR91G-55ZX*	GE,ZX	1.25Gb/S	80Km	1550nm	Dual SC

\*:

S: Standard temperature range, 0-70°C

A: Industrial temperature range, -40-85°C;

1X9 BiDi SC Optical Transceiver						
	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	EBD9155-3155AR1*	STM1 S1.1	155Mb/S	20Km	1310nm TX/1550nm RX	Single SC
	EBD9155-5531AR1*	FE LE			1550nm TX/1310nm RX	
2	EBD9155-3155LR1*	STM1 L1.1	155Mb/S	40Km	1310nm TX/1550nm RX	Single SC
	EBD9155-5531LR1*	FE EX			1550nm TX/1310nm RX	
3	EBD9155-3155LR2*	STM1 L1.2	155Mb/S	80Km	1310nm TX/1550nm RX	Single SC
	EBD9155-5531LR2*	FE ZX			1550nm TX/1310nm RX	
4	EBD9622-3155AR1*	STM4 S4.1	622Mb/S	20Km	1310nm TX/1550nm RX	Single SC
	EBD9622-5531AR1*				1550nm TX/1310nm RX	
5	EBD9622-3155LR1*	STM4 L4.1	622Mb/S	40Km	1310nm TX/1550nm RX	Single SC
	EBD9622-5531LR1*				1550nm TX/1310nm RX	
6	EBD9622-3155LR2*	STM4 L4.2	622Mb/S	60Km	1310nm TX/1550nm RX	Single SC
	EBD9622-5531LR2*				1550nm TX/1310nm RX	
7	EBD91G-3155LE*	GE,LE	1.25Gb/S	20Km	1310nm TX/1550nm RX	Single SC
	EBD91G-5531LE*				1550nm TX/1310nm RX	
8	EBD91G-3155EX*	GE, EX	1.25Gb/S	40Km	1310nm TX/1550nm RX	Single SC
	EBD91G-5531EX*				1550nm TX/1310nm RX	
9	EBD91G-3155ZX*	GE,ZX	1.25Gb/S	60Km	1310nm TX/1550nm RX	Single SC
	EBD91G-5531ZX*				1550nm TX/1310nm RX	

1X9 SC CWDM Optical Transceiver						
	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ECD9155-##X2*	STM-1,OC-3,FE	155Mb/S	120Km	##:1270~1610nm	Dual SC
2	EBC9155-##X2*	BiDi, STM-1,OC-3,FE	155Mb/S	120Km	##:1270~1610nm	Single SC
3	ECD9622-##LR2*	STM-4,OC-12	622Mb/S	80Km	##:1270~1610nm	Dual SC
4	EBC9622-##LR2*	BiDi,STM-4,OC-12	622Mb/S	80Km	##:1270~1610nm	Single SC
5	ECD91G-##ZX*	OC-24,GE,FC	1.25Gb/S	80Km	##:1270~1610nm	Dual SC
6	EBC91G-##ZX*	BiDi,OC-24,GE,FC	1.25Gb/S	80Km	##:1270~1610nm	Single SC

\*:

S: Standard temperature range, 0-70°C

A: Industrial temperature range, -40-85°C;

All the SFP part number: with DDM function; If no DDM function needed, all the part number needs add "N" at the end, e.g:

ESFP155-31AR1S: with DDM function

ESFP155-31AR1SN: without DDM function.

## SFP OC3/STM1 SDH Optical Transceiver

	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ESFP155-31AR1*	OC3/STM1 S1.1	155Mb/S	15Km	1310nm	Dual LC
2	ESFP155-31LR1*	OC3/STM1 L1.1	155Mb/S	40Km	1310nm	Dual LC
3	ESFP155-55LR2*	OC3/STM1 L1.2	155Mb/S	80Km	1550nm	Dual LC
4	ESFP155-55X2*	OC3/STM1 X1.2	155Mb/S	120Km	1550nm	Dual LC

## SFP OC12/STM4 SDH Optical Transceiver

	Part Number	Application	Data Rate	Reach	Wave22length	Connector
1	ESFP622-31SR1*	OC12/STM4 S4.1	622Mb/S	15Km	1310nm	Dual LC
2	ESFP622-31LR1*	OC12/STM4 L4.1	622Mb/S	40Km	1310nm	Dual LC
3	ESFP622-55LR2*	OC12/STM4 L4.2	622Mb/S	80Km	1550nm	Dual LC

## SFP OC48/STM16 SDH Optical Transceiver

	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ESFP2G-31SR*	OC48/STM16,I-16	2.5Gb/S	2Km	1310nm	Dual LC
2	ESFP2G-31AR1*	OC48/STM16,S16.1	2.5Gb/S	15Km	1310nm	Dual LC
3	ESFP2G-31LR1*	OC48/STM16,L16.1	2.5Gb/S	40Km	1310nm	Dual LC
4	ESFP2G-55LR2*	OC48/STM16,L16.2	2.5Gb/S	80Km	1550nm	Dual LC

\*:

S: Standard temperature range, 0-70°C

A: Industrial temperature range, -40-85°C;

All the SFP part number: with DDM function; If no DDM function needed, all the part number needs add "N" at the end, e.g:

ESFP155-31AR1S: with DDM function

ESFP155-31AR1SN: without DDM function.

## SFP FE Optical Transceiver

	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ESFP155-31AR1*	FE,LX	125Mb/S	10Km	1310nm	Dual LC
2	ESFP155-31LR1*	FE,EX	125Mb/S	40Km	1310nm	Dual LC
3	ESFP155-55LR2*	FE,ZX	125Mb/S	80Km	1550nm	Dual LC

## SFP GE Optical Transceiver

	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ESFP1G-31LX*	GE,LX	1.25Gb/S	10Km	1310nm	Dual LC
2	ESFP1G-31EX*	GE,EX	1.25Gb/S	40Km	1310nm	Dual LC
3	ESFP1G-55ZX*	GE,ZX	1.25Gb/S	80Km	1550nm	Dual LC
4	ESFP1G-55VX*	GE,VX	1.25Gb/S	120Km	1550nm	Dual LC

## SFP Multirate(up to 2.67Gb/S) Optical Transceiver

	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ESFPMR-31SR*	SDH,GE,FC	~2.67Gb/S	2Km	1310nm	Dual LC
2	ESFPMR-31AR1*	SDH,GE,FC	~2.67Gb/S	15Km	1310nm	Dual LC
3	ESFPMR-55AR2*	SDH,GE,FC	~2.67Gb/S	40Km	1550nm	Dual LC
4	ESFPMR-55LR2*	SDH,GE,FC	~2.67Gb/S	80Km	1550nm	Dual LC

## SFP 1xFC 2xFC Optical Transceiver

	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ESFP2G-31AR1*	1FC/2FC	2.125Gb/S	10Km	1310nm	Dual LC
2	ESFP2G-55AR2*	1FC/2FC	2.125Gb/S	40Km	1550nm	Dual LC
3	ESFP2G-55LR2*	1FC/2FC	2.125Gb/S	80Km	1550nm	Dual LC
4	ESFP2G-55X2*	1FC/2FC	2.125Gb/S	115Km	1550nm	Dual LC

\*:

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All the SFP part number: with DDM function; If no DDM function needed, all the part number needs add "N" at the end, e.g:

ESFP155-31AR1S: with DDM function

ESFP155-31AR1SN: without DDM function.

SFP BiDi Optical Transceiver						
	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	EBSPFE-3155LX*	FE,LX	125Mb/S	10Km	1310nm TX/1550nm RX	Single LC
2	EBSPFE-5531LX*	FE,LX	125Mb/S	10Km	1550nm TX/1310nm RX	Single LC
3	EBSP1G-3149LX*	GE,LX	1.25Gb/S	10Km	1310nm TX/1490nm RX	Single LC
4	EBSP1G-4931LX*	GE,LX	1.25Gb/S	10Km	1490nm TX/1310nm RX	Single LC
5	EBSP1G-3155LX*	GE,LX	1.25Gb/S	10Km	1310nm TX/1550nm RX	Single LC
6	EBSP1G-5531LX*	GE,LX	1.25Gb/S	10Km	1550nm TX/1310nm RX	Single LC
7	EBSP1G-3149EX*	GE,EX	1.25Gb/S	40Km	1310nm TX/1490nm RX	Single LC
8	EBSP1G-4931EX*	GE,EX	1.25Gb/S	40Km	1490nm TX/1310nm RX	Single LC

SFP CWDM Optical Transceiver						
	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	ECSP1G-##ZX*	GE,ZX	1.25Gb/S	80Km	##:1270~1610nm	Dual LC
2	ECSP1G-##VX*	GE,VX	1.25Gb/S	120Km	##:1270~1610nm	Dual LC
3	ECSPMR-##AR2*	SDH,GE,FC	~2.67Gb/S	40Km	##:1270~1610nm	Dual LC
4	ECSPMR-##LR2*	SDH,GE,FC	~2.67Gb/S	80Km	##:1270~1610nm	Dual LC

XFP Optical Transceiver						
	Part Number	Application	Data Rate	Reach	Wavelength	Connector
1	EXFP10G-31LR*	10GBase LR	11.1Gb/S	10Km	1310nm	Dual LC
2	EXFP10G-55ER*	10GBase ER	11.1Gb/S	40Km	1550nm	Dual LC
3	EXFP10G-55ZR*	10GBase ZR	11.1Gb/S	80Km	1550nm	Dual LC

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A: Industrial temperature range, -40-85°C;

All the SFP part number: with DDM function; If no DDM function needed, all the part number needs add "N" at the end, e.g:

ESFP155-31AR1S: with DDM function

ESFP155-31AR1SN: without DDM function.

## Contact Information:

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