

Lightron's Tunable Portfolio

for WDM network solutions

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国内販売代理店

サンインストルメント株式会社

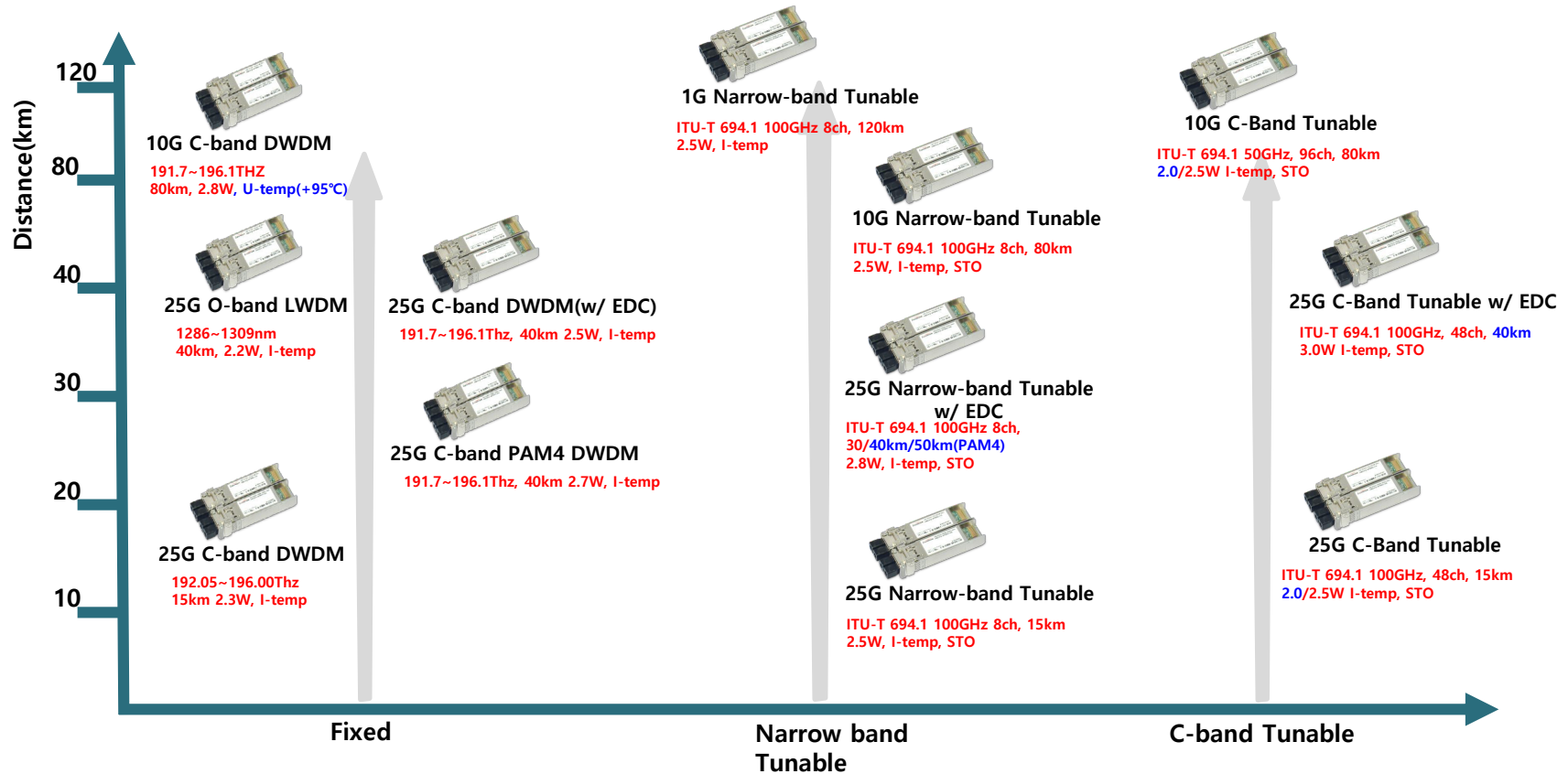


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WDM Solutions Line-up



10G WDM SFP+ solutions

◆ Features

- Up to 10.3125Gb/s bit rates
- DFB-LD and DWDM EML based transmitters with/without TEC
- APD and PIN-PD based receivers
- 1270~1610nm CWDM
- DWDM ITU-T 694.1 Grid(C-band 100GHz spacing)

◆ Applications

- 10G Ethernet
- eCPRI & CPRI
- Digital repeater and base station
- Up to 80km point to point links

◆ Product in detailed



Product Description	Wavelength	Reach	Tx / Rx Component	Power Budget	Power Consumption	Operating Temp.	Status
10G CWDM LR	1270~1610	10km	DFB / PIN-PD,APD	10/14dB	<1.2W	0°C~+70°C	In Production
10G CWDM ZR	1470 ~ 1610	80km	EML/APD	23dB	<1.5W	-20°C~+75°C	In Production
10G C-band DWDM LR	ITU-T 694.1 Grid	~ 20km	EML / APD	24dB	< 2.0W/<2.8W	-40°C~+95°C	In Production
10G C-band DWDM ER/ZR	ITU-T 694.1 Grid	40/80km	EML / APD	24dB	<2.0W/< 2.8W	-40°C~+95°C	In Production

25G WDM SFP28 solutions

◆ Features

- Up to 25.78Gb/s bit rates
- DFB-LD and DWDM EML based transmitters with/without TEC
- APD and PIN-PD based receiver
- O-band, C-band DWDM wavelength

◆ Applications

- 25G Ethernet, eCPRI & CPRI
- Digital repeater and base station
- Other optical links

◆ Product in detailed



Product Description	Wavelength	Reach	Tx / Rx Component	Power Budget	Power Consumption	Operating Temp.	Status
SFP28 CWDM	1270nm~1330nm	~30km	DML / PIN-PD	19dB	<1.5W	-40°C~+85°C	In Production
SFP28 LWDM	1269.23 ~ 1318.35nm(800GHz)	~ 30km	DML / PIN or APD	16/19dB	< 2.5W	-40°C~+85°C	In Production
SFP28 LWDM	1286.66 ~ 1309.14nm(800GHz)	~ 30km	EML / APD	19dB	< 2.2W	-40°C~+85°C	In Production
SFP28 C-Band DWDM	ITU-T 694.1 Grid	~ 15km	EML / APD	16dB	< 2.3W	-40°C~+85°C	In Production

25G PAM4 C-band DWDM SFP28 solutions

◆ Features

- Up to 25.78Gb/s bit rates
- EML based cooled transmitter with TEC
- APD and PIN-PD based receiver with linear TIA
- DWDM ITU-T 694.1 Grid(C-band 100GHz spacing)
- Low dispersion penalty with 12.89Gbaud PAM4(25.78Gb/s) modulation
- [Transmission distance extended to 30km in the current system\(C-band DWDM, NRZ\)](#)

◆ Applications

- 25G Ethernet, eCPRI & CPRI
- Digital repeater and base station
- Other optical links

◆ Product in detailed



Product Description	Wavelength	Reach	Tx / Rx Component	PB & LB	Power Consumption	Operating Temp.	Status
25G PAM4 ER-lite	ITU-T 694.1 Grid	~ 20km	EML / PIN-PD+Linear TIA	14dB	< 2.7W	-40°C~+85°C	In Production
25G PAM4 ER-lite	ITU-T 694.1 Grid	~ 20km	EML / APD+Linear TIA	19dB	< 2.7W	-40°C~+85°C	In Production
25G PAM4 ER-lite	ITU-T 694.1 Grid	~ 30km	EML / APD+Linear TIA	18.5dB	< 2.7W	-40°C~+85°C	Pre Production
25G PAM4 ER	ITU-T 694.1 Grid	~ 40km	EML / APD+Linear TIA	18.5dB	< 2.7W	-40°C~+85°C	EVT

25G C-band DWDM 30/40km with EDC

◆ Features

- Up to 25.78Gb/s bit rates
- C-band DWDM EML based transmitters
- APD based receiver with linear TIA, EDC
- C-band DWDM wavelength

◆ Applications

- 25G Ethernet, eCPRI & CPRI
- Digital repeater and base station
- Other optical links

◆ Product in detailed



Product Description	Wavelength	Reach	Tx / Rx Component	Power Budget	Power Consumption	Operating Temp.	Status
SFP28 C-Band DWDM	ITU-T 694.1 Grid	~ 30km	EML / APD	21dB	< 2.5W	-40°C~+85°C	Pre-production
SFP28 C-Band DWDM	ITU-T 694.1 Grid	~ 40km	EML / APD	21dB	< 2.5W	-40°C~+85°C	2026 4Q ES

10G/25G C-band tunable SFP28 solutions

◆ Features

- 10Gb/s or 25.78Gb/s bit rates
- Integrated DBR and MZM for tunable TOSA & built-in wavelength locker
- APD based receiver
- ITU-T DWDM ch.14~ch.61 100GHz or 50GHz spacing
- Automated Self Pairing(ASP) functionality
- **SmartTunable MSA compatible**(Leading the implementation of functions by Lightron)

SmartTunable^{MSA}
<http://www.smarttunable-msa.org/>

◆ Applications

- Gigabit Ethernet : 10G Ethernet, 25G Ethernet
- eCPRI & CPRI
- Digital repeater and base station

◆ Product in detailed

Product Description	Wavelength	Reach	Tx / Rx Component	Power Budget	Power Consumption	Operating Temp.	Status
10G C-band tunable	ITU-T 694.1 Grid	~ 80km	DBR / APD	24dB	2.0W	-40°C~+85°C	In Production
10G C-band tunable	ITU-T 694.1 Grid	~ 80km	DBR / APD	24dB	3.0W	-40°C~+90°C	In Production
25G C-band tunable	ITU-T 694.1 Grid	~ 15km	DBR / APD	20dB	2.0W	-40°C~+85°C	In Production
25G C-band tunable	ITU-T 694.1 Grid	~ 15km	DBR / APD	21dB	3.0W	-40°C~+90°C	In Production

Note: ASP : Automated Self-Pairing, Smart tune



25G C-band tunable SFP28 with EDC solutions

◆ Features

- 25.78Gb/s bit rates, up to 40km
- Integrated DBR and MZM for tunable TOSA & built-in wavelength locker
- APD based receiver with linear TIA, EDC
- ITU-T DWDM ch.14~ch.61 100GHz spacing
- Automated Self Pairing(ASP) functionality
- SmartTunable MSA compatible(Leading the implementation of functions by Lightron)

SmartTunable MSA

<http://www.smarttunable-msa.org/>

◆ Applications

- Gigabit Ethernet : 25G Ethernet
- eCPRI & CPRI
- Digital repeater and base station


◆ Product in detailed



Product Description	Wavelength	Reach	Tx / Rx Component	Power Budget	Power Consumption	Operating Temp.	Status
25G C-band tunable	ITU-T 694.1 Grid	> 40km	DBR / APD	23dB	3.0W	-40°C~+85°C	2026 3Q ES

1G/10G/25G Narrow-band tunable SFP28 solutions

◆ Features

- Up to 10Gb/s, 25.78Gb/s bit rates
- DBR + EAM Narrow-band tunable transmitter
- APD based receiver
- 8ch-tunability in 100GHz-spaced grid in C-band
- ITU-T DWDM ch.21~ch.60 100GHz spacing
- Automated Self Pairing(ASP) functionality
- **SmartTunable**  compatible (Leading the implementation of functions by Lightron)
<http://www.smarttunable-msa.org/>



◆ Applications


- Gigabit Ethernet : 10G Ethernet, 25G Ethernet
- eCPRI & CPRI
- Digital repeater and base station

◆ Product in detailed

Product Description	Wavelength	Reach	Tx / Rx Component	Power Budget	Power Consumption	Operating Temp.	Status
1G C-band tunable	ITU-T 694.1 Grid	80/120km	EML / APD	24dB/30dB	< 2.5W	-40°C~+85°C	Pre-production
10G C-band tunable	ITU-T 694.1 Grid	80km	EML / APD	24dB	< 2.5W	-40°C~+85°C	Pre-production
25G C-band tunable	ITU-T 694.1 Grid	~ 15km	EML / APD	19dB	< 2.5W	-40°C~+85°C	Pre-production

25G Narrow-band tunable SFP28 with EDC solutions

◆ Features

- 10Gb/s or 25.78Gb/s bit rates
- EML Narrow-band tunable transmitter
- APD based receiver with linear TIA, EDC
- 8ch-tunability in 100GHz-spaced grid in C-band
- ITU-T DWDM ch.21~ch.60 100GHz spacing
- Automated Self Pairing(ASP) functionality
- **SmartTunable**  compatible (Leading the implementation of functions by Lightron)
<http://www.smarttunable-msa.org/>



◆ Applications

- Gigabit Ethernet : 25G Ethernet
- eCPRI & CPRI
- Digital repeater and base station

◆ Product in detailed

Product Description	Wavelength	Reach	Tx / Rx Component	Power Budget	Power Consumption	Operating Temp.	Status
25G C-band tunable	ITU-T 694.1 Grid	30km/40km	EML / APD	23dB	< 2.8W	-40°C~+85°C	Pre-production / 2026 3Q ES