



PRODUCT MANUAL

LEANPAC

Pioneer of the IOT Components

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1.25G~2.67G SFP BIDI Transceiver

Product Features

- Single Fiber Bi-directional Transmission
- Hot-pluggable SFP Footprint
- Single LC or SC Connector optional
- Wide Distance Supported from 2km to 120km
- Built-in Digital Diagnostic Monitor function
- Metal Enclosure for Lower EMI
- Comply with SFP MSA
- Comply with SDH/SONET
- Comply with IEEE Std 802.3
- Single +3.3V Power Supply
- RoHS-6 Compliant
- Case operating temperature :
0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-BL31551G-20x	SFP BIDI 20km	1.25	20	1310nm FP	1550nm PIN	-9~-3	≤-23
LPS-BL55311G-20x	SFP BIDI 20km	1.25	20	1550nm DFB	1310nm PIN	-9~-3	≤-23
LPS-BL31491G-20x	SFP BIDI 20km	1.25	20	1310nm FP	1490nm PIN	-9~-3	≤-23
LPS-BL49311G-20x	SFP BIDI 20km	1.25	20	1490nm DFB	1310nm PIN	-9~-3	≤-23
LPS-BL31491G-40x	SFP BIDI EX	1.25	40	1310nm DFB	1490nm PIN	-5~0	≤-23
LPS-BL49311G-40x	SFP BIDI EX	1.25	40	1490nm DFB	1310nm PIN	-5~0	≤-23
LPS-BL49551G-80x	SFP BIDI ZX	1.25	80	1490nm DFB	1550nm PIN	-2~+3	≤-24
LPS-BL55491G-80x	SFP BIDI ZX	1.25	80	1550nm DFB	1490nm PIN	-2~+3	≤-24
LPS-BL49551G-A2x	SFP BIDI ZX+	1.25	120	1490nm DFB	1550nm APD	-1~+4	≤-32
LPS-BL55491G-A2x	SFP BIDI ZX+	1.25	120	1550nm DFB	1490nm APD	-1~+4	≤-32
LPS-BL31552G-02x	SFP BIDI 2km	2.5	2	1310nm FP	1550nm PIN	-7~-3	≤-18
LPS-BL55312G-02x	SFP BIDI 2km	2.5	2	1550nm DFB	1310nm PIN	-7~-3	≤-18
LPS-BL31492G-20x	SFP BIDI 20km	2.5	20	1310nm DFB	1490nm PIN	-5~0	≤-18
LPS-BL49312G-20x	SFP BIDI 20km	2.5	20	1490nm DFB	1310nm PIN	-5~0	≤-18
LPS-BL49552G-40x	SFP BIDI EX	2.5	40	1490nm DFB	1550nm PIN	-2~+3	≤-18
LPS-BL49552G-40x	SFP BIDI EX	2.5	40	1550nm DFB	1490nm PIN	-2~+3	≤-18
LPS-BL49552G-80x	SFP BIDI ZX	2.5	80	1490nm DFB	1550nm APD	-2~+3	≤-28
LPS-BL55492G-80x	SFP BIDI ZX	2.5	80	1550nm DFB	1490nm APD	-2~+3	≤-28

1.25G~2.67G SFP Duplex Transceiver

Product Features

- Hot-pluggable SFP Footprint
- Dual LC Connector
- Wide Distance Supported from 20KM to 120km
- Built-in Digital Diagnostic Functions
- Metal Enclosure for Lower EMI
- Comply with SFP MSA
- Comply with SDH/SONET
- Comply with IEEE Std 802.3
- Single +3.3V Power Supply
- RoHS-6 Compliant
- Case operating temperature :
0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-SM311G-20x	SFP 20km	1.25	20	1310nm FP	PIN	-9~-3	≤-24
LPS-SM311G-40x	SFP EX	1.25	40	1310nm DFB	PIN	-2~+3	≤-24
LPS-SM551G-40x	SFP EX	1.25	40	1550nm DFB	PIN	-5~0	≤-24
LPS-SM551G-80x	SFP ZX	1.25	80	1550nm DFB	PIN	-2~+3	≤-24
LPS-SM551G-A2x	SFP ZX+	1.25	120	1550nm DFB	APD	0~+5	≤-32

1.25G~2.67G SFP CWDM Transceiver

Product Features

- Hot-pluggable SFP package
- Dual LC Connector
- Wide distance Supported Max 120km
- Built-in Digital Diagnostic Monitor functions optional
- Metal Enclosure for Lower EMI
- Comply with SFP MSA
- Comply with SDH/SONET
- Comply with IEEE Std 802.3
- 18-Wavelength CWDM 1270nm to 1610nm available
- Single +3.3V Power Supply
- Low Power Dissipation
- RoHS-6 Compliant
- Case operating temperature :
0°C to+70°C,-40°C to+85°C



Ordering Information

Part Number	Description	Data Rate	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-CWxx1G-40x	SFP CWDM EX	1.25Gb/s	40	CWDM DFB	PIN	-5~0	≤-24
LPS-CWxx1G-80x	SFP CWDM ZX	1.25Gb/s	80	CWDM DFB	PIN	0~+4	≤-24
LPS-CWxx1G-A2x	SFP CWDM ZX+	1.25Gb/s	120	CWDM DFB	APD	0~+4	≤-32
LPS-CWxx2G-40x	SFP CWDM EX	2.5Gb/s	40	CWDM DFB	PIN	-2~+3	≤-23
LPS-CWxx2G-80x	SFP CWDM ZX	2.5Gb/s	80	CWDM DFB	APD	0~+5	≤-28

1.25G~2.67G SFP DWDM Transceiver

Product Features

- Hot-pluggable SFP package
- Dual LC Connector
- Wide distance Supported from 40km to 120km
- Built-in Digital Diagnostic Monitor functions optional
- Metal Enclosure for Lower EMI
- Comply with SFP MSA
- Comply with SDH/SONET
- Comply with IEEE Std 802.3
- DWDM 100GHz ITU Grid C Band Available
- Single +3.3V Power Supply
- Low Power Dissipation
- RoHS-6 Compliant
- Case operating temperature :
0°C to+70°C,-40°C to+85°C



Ordering Information

Part Number	Description	Data Rate	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-DWxx1G-80x	SFP DWDM ZX	1.25Gb/s	80	CWDM DFB	PIN	0~+4	≤-24
LPS-DWxx1G-A2x	SFP DWDM ZX+	1.25Gb/s	120	CWDM DFB	APD	0~+5	≤-32
LPS-DWxx2G-40x	SFP DWDM EX	2.5Gb/s	40	CWDM DFB	PIN	-2~+3	≤-18
LPS-DWxx2G-80x	SFP DWDM ZX	2.5Gb/s	80	CWDM DFB	APD	0~+5	≤-28

6G SFP+ & 3G SFP CPRI

Product Features

- Duplex LC or Single LC Connector
- Single 3.3 V Power Supply
- Compliant with SFP+ and SFP MSA
- Compliant with CPRI/OBSAI
- Built-in Digital Diagnostic Monitor function
- Multirate for 1.228 Gb/s to 6.144 Gb/s
- 18-Wavelength CWDM 1270nm to 1610nm available
- Low Power Dissipation
- RoHS-6 Compliant
- Case operating temperature :
0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-CWxx3G-40x	SFP CWDM	3.072	40	CWDM DFB	PIN	-2~+3	≤-16
LPS-CWxx3G-80x	SFP CWDM	3.072	80	CWDM DFB	APD	0~+5	≤-28
LPS-BL31553G-20x	SFP BIDI	3.072	20	1310nm DFB	1550nm PIN	-5~0	≤-18
LPS-BL55313G-20x	SFP BIDI	3.072	20	1550nm DFB	1310nm PIN	-5~0	≤-18
LPS-CWxx6G-40x	SFP+ CWDM	6.144	40	CWDM DFB	PIN	-4~+1	≤-16
LPS-CWxx6G-80x	SFP+ CWDM	6.144	80	CWDM DFB	APD	0~+4	≤-24
LPS-BL27336G-20x	SFP+ BIDI	6.144	20	1270nm DFB	1330nm PIN	-2~+3	≤-16
LPS-BL33276G-20x	SFP+ BIDI	6.144	20	1330nm DFB	1270nm PIN	-2~+3	≤-16

Copper SFP/SFP+ Transceiver

Product Features

- Hot-pluggable SFP/SFP+ footprint
- Compliant with SFF-8472
- Low power dissipation
- Fully Metallic Enclosure for Low EMI
- Compliant with IEEE 802.3 Compliant
- Single +3.3V power Supply
- Compact RJ-45 connector assembly
- RoHS compliant and lead-free
- Case operating temperature :
0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate	Reach(m)	Connector	Rx_LOS	Tx Disable
LPP-SFP-TC	SFP Copper	10/100/1000Mb/s	100	RJ45	YES	YES
LPP-SFP-TI	SFP Copper	10/100/1000Mb/s	100	RJ45	YES	YES
LPP-10GE-T	SFP+ Copper 10G	10Gb/s	30	RJ45	YES	YES

10G SFP+ /XFP BIDI Transceiver

Product Features

- Up to 11.3Gb/s data links
- Hot-pluggable SFP+/XFP footprint
- BIDI LC/UPC type pluggable optical interface
- Metal enclosure, for lower EMI
- Meet ESD requirements resist 8KV direct contact voltage
- RoHS compliant and lead-free
- Support Digital Diagnostic Monitoring interface
- Single +3.3V power supply
- Compliant with SFP+ MSA and SFF-8472/INF-8077i
- Case operating temperature :
0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-BL273310-10C	SFP+ BIDI LR	10	10	1270nm DFB	1330nm PIN	-6~-1	≤-14
LPX-BL273310-10C	XFP BIDI LR	10	10	1270nm DFB	1330nm PIN	-6~-1	≤-14
LPS-BL332710-10C	SFP+ BIDI LR	10	10	1330nm DFB	1270nm PIN	-6~-1	≤-14
LPX-BL332710-10C	XFP BIDI LR	10	10	1330nm DFB	1270nm PIN	-6~-1	≤-14
LPS-BL273310-20C	SFP+ BIDI 20km	10	20	1270nm DFB	1330nm PIN	-2~+3	≤-16
LPX-BL273310-20C	XFP BIDI 20km	10	20	1270nm DFB	1330nm PIN	-2~+3	≤-16
LPS-BL332710-20C	SFP+ BIDI 20km	10	20	1330nm DFB	1270nm PIN	-2~+3	≤-16
LPX-BL332710-20C	XFP BIDI 20km	10	20	1330nm DFB	1270nm PIN	-2~+3	≤-16
LPS-BL273310-40C	SFP+ BIDI ZR	10	40	1270nm DFB	1330nm PIN	0~+5	≤-16
LPX-BL273310-40C	XFP BIDI ZR	10	40	1270nm DFB	1330nm PIN	0~+5	≤-16
LPS-BL332710-40C	SFP+ BIDI ZR	10	40	1330nm DFB	1270nm PIN	0~+5	≤-16
LPX-BL332710-40C	XFP BIDI ZR	10	40	1330nm DFB	1270nm PIN	0~+5	≤-16
LPS-BL495510-80C	SFP+ BIDI ZR	10	80	1490nm EML	1550nm APD	1~+5	≤-23
LPX-BL495510-80C	XFP BIDI ZR	10	80	1490nm DEML	1550nm APD	1~+5	≤-23
LPS-BL554910-80C	SFP+ BIDI ZR	10	80	1550nm EML	1490nm APD	1~+5	≤-23
LPX-BL554910-80C	XFP BIDI ZR	10	80	1550nm DEML	1490nm APD	1~+5	≤-23

10G SFP Duplex Transceiver

Product Features

- Up to 11.3Gb/s data links
- Hot-pluggable SFP+ footprint
- Duplex LC/UPC type pluggable optical interface
- Metal enclosure, for lower EMI
- Meet ESD requirements, resist 8KV direct contact voltage
- RoHS compliant and lead-free
- Support Digital Diagnostic Monitoring interface
- Single +3.3V power supply
- Compliant with SFP+MSA and SFF-8472
- Case operating temperature :
0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-MM8510-S3x	SFP+ SR	10	0.3	850nm VCSEL	PIN	-6~-1	≤-11
LPS-SM3110-02x	SFP+ IR	10	2	1310nm FP	PIN	-8.2~0.5	≤-14
LPS-SM3110-10x	SFP+ LR	10	10	1310nm DFB	PIN	-6~-1	≤-14
LPS-SM3110-40x	SFP+ ER	10	40	1550nm EML	PIN	-1~+3	≤-16
LPS-SM5510-80x	SFP+ ZR	10	80	1550nm EML	APD	0~+5	≤-23

10G SFP+ /XFP CWDM Transceiver

Product Features

- Up to 11.3Gb/s data links
- CWDM DFB or EML laser and PIN/APD receiver
- Duplex LC/UPC type pluggable optical interface
- Metal enclosure, for lower EMI
- Meet ESD requirements, resist 8KV direct contact voltage
- RoHS compliant and lead-free
- Support Digital Diagnostic Monitoring interface
- Single +3.3V power supply
- Compliant with SFP+ MSA and SFF-8472
- Case operating temperature :
0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-CWxx10-10x	CWDM SFP+ LR	10	10	CWDM DFB	PIN	-5~0	≤-14
LPX-CWxx10-10x	CWDM XFP LR	10	10	CWDM DFB	PIN	-5~0	≤-14
LPS-CWxx10-20x	CWDM SFP+ 20km	10	20	CWDM DFB	PIN	-3~+2	≤-16
LPX-CWxx10-20x	CWDM XFP 20km	10	20	CWDM DFB	PIN	-3~+2	≤-16
LPS-CWxx10-40x	CWDM SFP+ ER	10	40	CWDM 1270~1450nm DFB	APD	0~+5	≤-16
LPX-CWxx10-40x	CWDM XFP ER	10	40	CWDM 1270~1450nm DFB	PIN	0~+5	≤-16
LPS-CWxx10-80C	CWDM SFP+ ER	10	80	CWDM 1470~1610nm EML	PIN	0~+5	≤-23
LPX-CWxx10-80C	CWDM XFP ZR	10	80	CWDM 1470~1610nm EML	PIN	0~+5	≤-23

10G SFP +/XFP DWDM Transceiver

Product Features

- Supports SFP+ supports up to 11.3Gb/s
- XFP supports 9.95Gb/s to 11.3Gb/s
- 50/100 GHz ITU channel spacing with integrated wavelength locker
- Up to 80km on 9/125/um SMF
- Hot-pluggable SFP+/XFP footprint
- Compliant with SFP+/XFP MSA with LC connector
- Metal enclosure, for lower EMI
- Meet ESD requirements, resist 8KV direct contact voltage
- RoHS compliant and lead-free
- Support Digital Diagnostic Monitoring interface
- Single +3.3V power supply
- Case operating temperature :
0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-DWxx10-40C	DWDM SFP+ ER	10	40	DWDM 1270~1450nm DFB	PIN	-1~+4	≤-16
LPX-DWxx10-40C	DWDM XFP ER	10	40	DWDM 1270~1450nm DFB	PIN	-1~+4	≤-16
LPS-DWxx10-80C	DWDM SFP+ ZR	10	80	DWDM 1470~1610nm EML	APD	-1~+5	≤-23
LPX-DWxx10-80C	DWDM XFP ZR	10	80	DWDM 1470~1610nm EML	APD	-1~+5	≤-23

25G SFP28 BIDI Transceiver

Product Features

- Up to 25Gb/s data links
- BIDI LC/UPC type pluggable optical interface
- Support Digital Diagnostic Monitoring interface
- Cost effective SFP28 solution, enables higher port densities and greater bandwidth
- 2-wire interface for management specifications compliant with SFF 8472 digital diagnostic monitoring interface for optical transceivers
- Electrically hot-pluggable
- Metal enclosure, for lower EMI
- Meet ESD requirements, resist 8KV direct contact voltage
- RoHS-6 compliant and lead-free
- Single +3.3V power supply
- Case operating temperature : 0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-BL273325-10X	SFP28 BIDI LR	25	10	1270nm DFB	1330nm PIN	-5~+2	≤-12
LPS-BL332725-10X	SFP28 BIDI LR	25	10	1330nm DFB	1270nm PIN	-5~+2	≤-12

25G SFP28 Active Optical Cable

Product Features

- Hot pluggable SFP28 package,
- Compliant with SFP28 MSA , IEEE 802.3
- Support 25Gb/s bidirectional data transmission.
- Compliant with SFF-8472 standard.
- Maximum distance up to 70M
- Compliant with EMI , ESD , RoHS-6
- Case operating temperature :
0°C to+70°C

Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (m)	TX	RX
LPS-AOC1125-xxC	SFP28 AOC	25	0.5~+70	850nm VCSEL	PIN



25G SFP28 Duplex Transceiver

Product Features

- Up to 25Gb/s data links
- 1310nm DFB or EML laser and PIN/APD receiver
- Support Digital Diagnostic Monitoring interface
- Cost effective SFP28 solution, enables higher port densities and greater bandwidth
- 2-wire interface for management specifications compliant with SFF 8472 digital diagnostic monitoring interface for optical transceivers
- Electrically hot-pluggable
- Metal enclosure, for lower EMI
- Meet ESD requirements, resist 8KV direct contact voltage
- RoHS-6 compliant and lead-free
- Single +3.3V power supply
- Case operating temperature : 0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-MM8525-S1C	SFP28 SR	25	100M(OM4)	850nm VCSEL	PIN	-8.4~+2.4	≤-5.2
LPS-SM3125-10x	SFP28 LR	25	10KM	1310nm DFB	PIN	-7~+2	≤-12.0(5E-5)
LPS-SM3125-40x	SFP28 ER	25	40KM	1310nm EML	APD	-1.6~+6	≤-19(5E-5)

25G SFP28 CWDM Transceiver

Product Features

- Up to 25Gb/s data links
- CWDM DFB laser and PIN/APD receiver
- Support Digital Diagnostic Monitoring interface
- Cost effective SFP28 solution, enables higher port densities and greater bandwidth
- 2-wire interface for management specifications compliant With SFF 8472 digital diagnostic monitoring interface for optical transceivers
- Electrically hot-pluggable
- Metal enclosure, for lower EMI
- Meet ESD requirements, resist 8KV direct contact voltage
- RoHS-6 compliant and lead-free
- Single +3.3V power supply
- Case operating temperature: 0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-CWxx25-10x	SFP28 CWDM	25	10	CWDM 1271~1371nm DFB	PIN	-1~+5	≤-14(5E-5)
LPS-CWxx25-20x	SFP28 CWDM	25	20	CWDM 1271~1371nm DFB	APD	-1~+5	≤-19(5E-5)

25G SFP28 DWDM Transceiver

Product Features

- Up to 25Gb/s data links
- 100 GHz ITU channel spacing with integrated wavelength locker
- Support Digital Diagnostic Monitoring interface
- 2-wire interface for management specifications compliant
- With SFF 8472 digital diagnostic monitoring interface for optical transceivers
- Electrically hot-pluggable
- Meet ESD requirements, resist 8KV direct contact voltage
- RoHS-6 compliant and lead-free
- Single +3.3V power supply
- Case operating temperature : 0°C to +70°C, -40°C to +85°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPS-DWxx25-10C	SFP28 DWDM	25	10	CH17-61EML	PIN	-1~+5	≤-14(5E-5)
LPS-DWxx25-40C	SFP28 DWDM	25	40	CH17-61EML	APD	-1~+5	≤-19(5E-5)

40G QSFP+ Transceiver

Product Features

- Hot-pluggable QSFP+ form factor
- Compliant with the QSFP+ MSA, IEEE 802.3 and OTN standard.
- 4 independent full-duplex channels
- Up to 11.2Gbps per channel bandwidth
- Aggregate bandwidth of > 40Gbps
- QSFP+ MSA compliant
- VCSEL/DFB transmitter
- Built-in digital diagnostic functions
- Duplex LC receptacles/Single MPO-12 receptacle
- Single +3.3V power supply operating
- TX input and RX output CDR retiming
- Case operating temperature: 0°C to +70°C, -40°C to +85°C
- RoHS-6 Compliant



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPQ-M8540-SR4C	QSFP+ SR4	40	100M	850nm VCSEL	PIN	-7.6~+2.4	≤-11
LPQ-CW40-FR4C	QSFP+ IR4	40	2	CWDM DFB	PIN	-7.5~+2.5	≤-11
LPQ-CW40-LR4C	QSFP+ LR4	40	10	CWDM DFB	PIN	-7~+2.5	≤-11
LPQ-CW40-ER4C	QSFP+ ER4	40	40	CWDM DFB	APD	-2.7~+4.5	≤-19

100G QSFP28 Active Optical Cable

Product Features

- Bandwidth density of 100 Gbps
- Transmission data rate up to 28Gbps per channel
- 4 channels 850nm 25G VCSEL array
- 4 channels 25G PIN photo detector array
- Internal CDR circuits on both receiver and transmitter channels
- Hot Pluggable QSFP28 form factor
- Maximum link length of 70m on OM3 Multimode Fiber (MMF) and 100m on OM4 MMF
- 3.3V power supply voltage
- Low power consumption per end <2.5w
- RoHS 6 compliant(lead free)
- Case operating temperature 0°C to+70°C



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX
LPQ-AOC11100-xxC	QSFP28 to QSFP28 AOC 1V1	100	0.5~100M	850nm VCSEL	PIN
LPQ-AOC14100-xxC	QSFP28 to SFP+ AOC 1V4	4*25	0.5~100M	850nm VCSEL	PIN

100G QSFP28 Transceiver

Product Features

- Hot-pluggable QSFP28 form factor
- compliant with the QSFP28 MSA and IEEE P802.3ba standard
- 4 channels full-duplex transceiver modules
- Up to 28Gb/s per channel, 112Gb/s aggregate bit rate
- Support InfiniBand EDR
- Single 3.3V power supply
- 4x25Gb/s VCSEL/DFB/EML transmitter
- 4x25G electrical interface
- Built in full digital diagnostics functions
- I2C management interface
- Maximum link length of 40km on SMF/100m on MMF
- Power dissipation < 5W
- Case operating temperature :
0°C to +70°C, -20°C to +80°C
- RoHS-6 Compliant



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPQ-M85100-SR4C	QSFP28 SR4	100	100M(OM4)	850nm VCSEL	PIN	-8.4~+2.4	≤-9.2(5E-5)
LPQ-CW100-FR4C	QSFP28 CWDM4	100	2	CWDM DFB	PIN	-6.5~+2.5	≤-11.5(5E-5)
LPQ-LW100-LR4C	QSFP28 LR4	100	10	LWDM DFB	PIN	-4.3~+4.5	≤-12(1E-12)
LPQ-LW100-ER4C	QSFP28 ER4	100	40	LWDM DFB	APD	-2.5~+4.5	≤-18.5(5E-5)

100G CFP2 Transceiver

Product Features

- Hot-pluggable CFP2 form factor
- Compliant with the CFP MSA, IEEE 802.3, and OTN series Protocols
- Supports 103.1Gb/s and 112Gb/s aggregate bit rates
- EML transmitter
- CAUI/CPPI electrical interface
- Duplex LC receptacles
- Built in full digital diagnostics functions
- Maximum link length of 10km on SMF
- Single 3.3V power supply
- Low power dissipation <9W
- Case operating temperature : 0°C to +70°C
- RoHS-6 Compliant



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPC2-LW100-LR4C	CFP2 LR4	100	10	1294 ~ 1310nm LWDM EML	PIN	-4.3~+4.5	≤-8.6
LPC2-LW100-ER4C	CFP2 ER4	100	40	1294 ~ 1310nm LWDM EML	SOA+PIN	-2.9~+2.9	≤-21.4

1.25G~10G PON Transceiver

Product Features

- Small Form Factor Pluggable package with SC/UPC Connector
- Operating temperature range:
Commercial: 0~70°C
Industrial: -40~+85°C
- Single 3.3V power supply
- Digital diagnostic monitoring interface
- Small size, it can be used in the optical access system of high density optical interface
- Low EMI and excellent ESD protection
- Class I laser safety standard IEC-60825 compliant
- RoHS6 Compliance



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach (km)	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPXGSU-SC25-20C	SFP+ XGSPON ONU SC Receptacle	10	20	1270	APD	5~+9	-29
LPXGU-SC25-20C	SFP+ XGPON ONU SC Receptacle	TX2.5/RX10	20	1270	APD	3~+7	-29
LPXGST-SC25-20C	SFP+ XGSPON OLT	TX9.953/RX9.953	20	1577	APD	2~+5	-26
LPXGT-SC25-20C	SFP+ XGPON OLT	TX9.953/RX2.488	20	1577	APD	2~+5	27.5
LPG-BL43-20x	SFP GPON OLT	TX2.488/RX1.244	20	1490	APD	1.5~+5	-28
LPXGST-SC25-20CN1	SFP+ XGSPON OLT N1	10	20	1577	APD	2~+5	-26
LPXGST-SC25-20CN2	SFP+ XGSPON OLT N2	10	20	1577	APD	4~+7	-28
LPG-SC34-20Cxx	SFP GPON ONU SC Receptacle	TX1.244/RX2.488	20	1310	APD	0.5~+5	-28
LPFGUP-SCP34-20C	SFF GPON ONU SC Pigtail	TX1.244/RX2.488	20	1310	APD	0.5~+5	-28
LPFGU-SC34-20C	SFF GPON ONU SC Receptacle	TX1.244/RX2.488	20	1310	APD	0.5~+5	-28
LPG-SC4324-20EC3	SFP GPON OLT CALSS C+++	TX2.488/RX1.244	20	1490	APD	6~+10	-32
LPG-SC4324-20EC2	SFP GPON OLT CALSS C++	TX2.488/RX1.244	20	1490	APD	-4.5~+8	-32
LPG-SC4324-20C1	SFP GPON OLT CALSS C+	TX2.488/RX1.244	20	1490	APD	3~+7.1	-30
LPG-BL4324-20B1	SFP GPON OLT CALSS B+	TX2.488/RX1.244	20	1490	APD	1.5~+5	-28
LPE-SC3424-20Cxx	SFP EPON ONU SC Receptacle	TX1.244/RX1.244	20	1310	PIN	0~+4	-27
LPFEUP-SCP34-20C	SFF EPON ONU SC Pigtail	TX1.244/RX1.244	20	1310	PIN	0~+4	-27
LPFEUP-SC34-20C	SFF EPON ONU SC Receptacle	TX1.244/RX1.244	20	1310	PIN	0~+4	-27
LPE-SC4324-20C1	SFP EPON OLT Px20+	TX1.244/RX1.244	20	1490	APD	2~+7	-30
LPE-SC4324-20C2	SFP EPON OLT Px20++	TX1.244/RX1.244	20	1490	APD	5~+8	-30
LPE-SC4324-20C3	SFP EPON OLT Px20+++	TX1.244/RX1.244	20	1490	APD	7~+10	-30

200G QSFP56 Transceiver

Product Features

- Hot-pluggable QSFP56 form factor
- 4x 53.125 Gbps PAM4 electrical interface
- Low power dissipation <6W
- RoHS-6 compliant (lead-free)
- Commercial case temperature range of 0°C to 70°C
- Single 3.3V power supply
- Built-in digital diagnostic functionality
- I2C digital management interface
- Hardware SFF-8679 Rev 1.8 compliant
- Software QSFP-DD CMIS Rev 4.0 compliant



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPQ-M85200-SR4C	QSFP56 SR4	212.5	100m	850nm	PIN	-6.5~4	< -7
LPQ-CW200-FR4C	QSFP56 FR4	212.5	20km	1270~1330 CWDM	PIN	-4.2~4.5	< -5.5

400G QSFP-DD Transceiver

Product Features

- Compliant with IEEE Std 802.3bs
- Compliant with 400G-SR8/400G-DR4/400G-FR4/400G-LR4 optical
- Compliant with QSFP-DD MSA
- Integrated VCSEL/EML array and PD array
- Compliant with CMIS4.0 Management interface specifications
- 8x53.125Gb/s electrical interface (400GAUI-8)
- Maximum link length of 10km on SMF/100m on MMF with FEC
- Single +3.3V power supply
- Case temperature range: 0 ~ +70°C
- Maximum power consumption 10W
- RoHS compliant



Ordering Information

Part Number	Description	Data Rate (Gb/s)	Reach	TX	RX	Output Power (dBm)	Sensitivity (dBm)
LPQD-M85400-SR8C	QSFP-DD SR8	425	100m	850nm	PIN	-6.5~4	< -7
LPQ4-CW400-DR4C	QSFP-DD DR4	425	500m	1270~1330 CWDM	PIN	-7.2~4.4	< -4.6
LPQ4-CW400-FR4C	QSFP-DD FR4	425	2km	1270~1330 CWDM	PIN	-4.2~4.7	< -5.5
LPQD-CW400-LR4C	QSFP-DD LR4	425	10km	1270~1330 CWDM	PIN	-2.7~5.1	< -6.8