



Get delivered in weeks, not months

hello@hfa.one
+1-408-409-7449
www.hfa.one

SFP CATALOG

No	Reference	Medium	Package	Speed	Distance	Applications	Wavelength	Type
1	PA2-SFP+-10B-E-E-C	Single Mode Fiber	SFP+	11.3Gb/s	<40km	- 10GBASE-ER/EW&10G Ethernet - SDH STM64 - Other Optical Links	CWDM - 100 GHz ITU channel spacing	10GBASE
2	PA2-SFP+-DTxx10BZZC	Single Mode Fiber	SFP+	9.95 to 11.3Gb/s	<80km	- 10GBASE-ZR/ZW Ethernet - Sonet OC-192/SDHSDH STM-64 ITU-T G.959.1 - P1L1-2D2 - 10G Fiber channel	DWDM TUNABLE laser transmitter	10GBASE
3	PA2-SFP+-Dxx10BEEC	Single Mode Fiber	SFP+	11.3Gb/s	<40km	- 10GBASE-ER/EW&10G Ethernet - SDH STM64 - Other Optical Links	100 GHz ITU channel spacing	10GBASE
4	PA2-SFP+-Dxx10BZZC	Single Mode Fiber	SFP+	11.3Gb/s	<80km	- 10GBASE-ZR/ZW&10G Ethernet - SDH STM64 - Other Optical Links	100 GHz ITU channel spacing	10GBASE
5	PA2-SFP-10B-E-E-I	Single Mode Fiber	SFP+	8.5Gb/s to 11.3Gb/s	<40km	- 10GBASE-ER/EW Ethernet - 40km 10G Fiber channel - SONET OC-192/SDH STM-64	Cooled 1550nm EML laser transmitter	10GBASE
6	PA3-SFP+-10B-L-L-I	Single Mode Fiber	SFP+	11.3Gb/s	<10km	- 10GBASE-LR/LW - 10G Fiber Channel - CPRI Option1-8	DFB 1310nm LD for the transmitter	10GBASE
7	PA4-SFP+-10B-L-L-C	Single Mode Fiber	SFP+	11.3Gb/s	<10km	- 10GBASE-LR at 10.31Gbps - 10GBASE-LW at 9.95Gbps - OBSAI rates 6.144 Gb/s, 3.072 Gb/s, 1.536 Gb/s, 0.768Gb/s - CPRI rates 9.830 Gb/s,7.373Gb/s, 6.144 Gb/s, 4.915 Gb/s, 2.458 Gb/s, 1.229 Gb/s - Other optical links	1310nm	10GBASE
8	PA-QSFP+40BER4-C	Single Mode Fiber	QSFP+	11.2Gb/s per wavelength	<40km	- 40GBASE-ER4 Ethernet Links - Infiniband QDR and DDR interconnects - Client-side 40G Telecom connections	1271nm + 1291nm + 1311nm + 1331nm	40GBASE
9	PA-SFP+-10B-2-C	Single Mode Fiber	SFP+	10.3Gb/s	<2km	- CPRI Option1-8	1310nm FP laser	10G CPRI
10	PA-SFP+-10B-2-I	Single Mode Fiber	SFP+	10.3Gb/s	<2km	- CPRI Option1-8	1310nm FP laser	10G CPRI
11	PA-SFP+B(78)87-10B-20-C(I)	Single Mode Fiber	SFP+	11.1Gb/s	<20km	- 10GBASE-BX - 10GBASE-LR/LW - BIDI	- 1270nm DFB laser and APD receiver for 1330 nm - PA-SFP+B78-10B-20-C(I) - 1330nm DFB laser and APD receiver for 1270 nm - PA-SFP+B87-10B-20-C(I)	10GBASE
12	PA-SFP+B(78)87-10B-60-C(I)	Single Mode Fiber	SFP+	11.1Gb/s	<60km	- 10GBASE-BX - BIDI	- 1270nm DFB laser and APD receiver for PA-SFP+B78-10B-60-C(I) - 1330nm DFB laser and APD receiver for PA-SFP+B87-10B-60-C(I)	10GBASE
13	PA-SFP1BLX20CTXO	Single Mode Fiber	SFP	1.25Gb/s	<20km	- 100BASE Gigabit Ethernet - Fiber Channel - Routers Hubs or Repeaters	1310nm	100GBASE
14	PA-SFP-1000B-LX-CT-TXO	Single Mode Fiber	SFP	1.25Gb/s	<10km	- 100BASE Gigabit Ethernet - Fiber Channel - Routers Hubs or Repeaters	1310nm	100GBASE
15	PA-SFP-1000B-LX-IT-TXO	Single Mode Fiber	SFP	1.25Gb/s	<10km	- 100BASE Gigabit Ethernet - Fiber Channel - Routers Hubs or Repeaters	1310nm	100GBASE
16	PA-XFP-10BECWC	Single Mode Fiber	XFP	8.0Gb/s to 11.1Gb/s	<40km	- 10G CWDM Networks - SONET OC-192&SDH STM-64 at 9.953Gbps - 10G Ethernet Applications - 10G Fiber Channel Applications - 10GE over G.709 at 11.09Gbps - OC192 over FEC at 10.709Gbps - Other optical links, up to 11.1Gbps General	CWDM Cooled EML laser	10GBASE
17	PA-XFP-10B-L-L-x	Single Mode Fiber	XFP	9.95 Gb/s to 11.09Gb/s	<20km	- 10GBASE-LR/LW(10G Ethernet) - VSR-2000-2R1, I-64.1(STM-64) SR-(OC-192) - 1200-SM-LL-L(10G Fiber Channel)	independent Uncooled 1310nm DFB laser diode transmitter	10GBASE
18	PA2-SFP+-10B-T-Copper	Cat 6a/7 Copper Cable	SFP+	10.5Gb/s	<30m	- 10GBASE-T - 10G Ethernet	-	10GBASE
19	PA2-SFP+-10B-Z-Z-CT	Single Mode Fiber	SFP+	10.3Gb/s	<80km	- 10G BASE-ZR/ZW	1550nm EML cooled transmitter and High performance APD receiver	10GBASE
20	PA3-QSFP+40BLR4-C	Single Mode Fiber	QSFP	11.2Gb/s per wavelength	<10km	- 40G BASE-LR4 Ethernet Links - Rack to rack - Data centers Switches and Routers - Metro networks - Switches and Routers	1271nm + 1291nm + 1311nm + 1331nm	40GBASE
21	PA-SFP-1000BASE-EX-IT-TXO	Single Mode Fiber	SFP	1.25Gb/s	<40km	- 100BASE (Gigabit Ethernet) - Fiber Channel - Routers, Hubs or Repeaters	1330nm	1000BASE
22	PA-XFP-10B-E-E-C	Single Mode Fiber	XFP	9.95Gb/s to 11.3Gb/s	<40km	- 10GBASE-ER/EW 10G Ethernet - 40km 10G Fiber Channel - SONET OC-192 & SDH STM 64	Cooled 1550nm EML and PIN Receiver	10GBASE
23	PA-XFP-10B-E-E-I	Single Mode Fiber	XFP	9.95Gb/s to 11.3Gb/s	<40km	- 10GBASE-ER/EW 10G Ethernet - 40km 10G Fiber Channel - SONET OC-192 & SDH STM 64	Cooled 1550nm EML and PIN Receiver	10GBASE
24	PA2CSPB341000BLI	Single Mode Fiber	CSFP	1.25Gb/s	<10km	- 1000BASE-BX-10-U - Switch to Switch Interface - Gigabit Ethernet - Point to Point FTTH Application - Switched Backplane Applications - Router/Server Interface - Other Optical Links	1310nm FP laser transmitter and PIN photodetector	1000BASE
25	PAb-CSFPB342CH1000BEEI	Single Mode Fiber	CSFP	1.25Gb/s	<40km	- 1000BASE - Point to Point FTTH Application - Switched Backplane Applications - Router/Server Interface - Switch to Switch Interface - Other Optical Links	1310nm DFB laser transmitter and PIN photodetector	1000BASE
26	PA2-QP28-100BER4C	Single Mode Fiber	QSFP28	103.1Gb/s aggregate bit rate	<40km	- 100GBASE ER4 Ethernet Links - Infiniband QDR and DDR interconnects - Client side 100G Telecom connections	cooled 4x25Gb/s LAN WDM TOSA (1295.56, 1300.05, 1304.58, 1309.14nm)	100GBASE
27	PA3-QP28-100BCW4C	Single Mode Fiber	QSFP28	25.78Gbps Data rate per wavelength	<2km	- 100G Ethernet & 100GBASE LR4 - Data Center - Ethernet switches and router applications	1271nm + 1291nm + 1311nm + 1331nm	100GBASE
28	PA-QP28-100BER4I	Single Mode Fiber	QSFP28	25.78Gbps Data rate per wavelength	<40km	- 100GBASE-ER4 Ethernet Links - Infiniband QDR and DDR interconnects - Client-side 40G Telecom connections	cooled 4x25Gb/s LAN WDM TOSA (1295.56, 1300.05, 1304.58, 1309.14nm)	100GBASE
29	PA3-QP28-100BLR4I	Single Mode Fiber	QSFP28	25.78Gbps Data rate per wavelength	<10km	- 100GBASE-LR4 - Data Center - Local Area Network(LAN) - Ethernet switches and router applications	1295nm + 1300nm + 1304nm + 1309nm	100GBASE
30	PA3-SP28-25B-L-C	Single Mode Fiber	SFP28	24.3Gbps to 25.78125Gbps	<10km	- 25GBASE Ethernet - eCPRI	1310nm uncooled DML Laser and PIN photo detector	25GBASE
31	PA3-SP28-25B-L-I	Single Mode Fiber	SFP28	24.3Gbps to 25.78125Gbps	<10km	- 25GBASE Ethernet - eCPRI	1310nm DFB laser and PIN receiver	25GBASE
32	PA4-QP28-100BLR4C	Single Mode Fiber	QSFP28	103.125 Gb/s to 111.81 Gb/s	<10km	- 100GBASE-LR4 - Data Center - Local Area Network(LAN) - Ethernet switches and router applications	1295nm + 1300nm + 1304nm + 1309nm	10GBASE
33	PA-QP28-100B70C	Single Mode Fiber	QSFP28	103.125Gb/s aggregate bit rate	<70km	- 100GBASE-70km Ethernet Links - Infiniband QDR and DDR interconnects - Client-side 100G Telecom connections	cooled 4x25Gb/s LAN WDM EML TOSA (1295.56, 1300.05, 1304.58, 1309.14nm)	100GBASE
34	PA-QP28-100B70I	Single Mode Fiber	QSFP28	103.125Gb/s aggregate bit rate	<70km	- 100GBASE-70km Ethernet Links - Infiniband QDR and DDR interconnects - Client-side 100G Telecom connections	cooled 4x25Gb/s LAN WDM EML TOSA (1295.56, 1300.05, 1304.58, 1309.14nm)	100GBASE
35	PA-QP28-100BZR4C	Single Mode Fiber	QSFP28	103.125Gb/s aggregate bit rate	<80km	- 100GBASE-ZR4 100G Ethernet - Telecom networking	1295.56, 1300.05, 1304.58, 1309.14nm	100GBASE
36	PA-QP28-100BZR4I	Single Mode Fiber	QSFP28	103.125Gb/s aggregate bit rate	<80km	- 100GBASE-ZR4 Ethernet Links - Infiniband QDR and DDR interconnects - Telecom networking	1295.56, 1300.05, 1304.58, 1309.14nm	100GBASE
37	PA-SFP+B(45)54-10B-80-C	Single Mode Fiber	SFP+	11.1Gb/s	<80km	10GBASE-BX	- 1490nm DFB laser and APD receiver - PA-SFP+B45-10B-80-C - 1550nm DFB laser and APD receiver - PA-SFP+B54-10B-80-C	10GBASE
38	PA-SFP+B(78)87-10B-10-C(I)	Single Mode Fiber	SFP+	11.1Gb/s	<10km	10GBASE-BX	- 1270nm DFB laser and APD receiver for PA-SFP+B78-10B-10-C(I) - 1330nm DFB laser and APD receiver for PA-SFP+B87-10B-10-C(I)	10GBASE
39	PA-SFP+B(78)87-10B-40-C(I)	Single Mode Fiber	SFP+	11.1Gb/s	<40km	10GBASE-BX	- 1270nm DFB laser and APD receiver for PA-SFP+B78-10B-40-C(I) - 1330nm DFB laser and APD receiver for PA-SFP+B87-10B-40-C(I)	10GBASE
40	PA-SFPB34(43)-1000B-20-C(I)	Single Mode Fiber	SFP	1.25Gb/s	<20km	- 1000BASE-BX20-U BIDI - Gigabit Ethernet - Fiber Channel - Router, Hubs or Repeaters	- 1310 nm FP Laser for transmitter and 1490 nm PIN+TIA for receiver - 1490nm DFB Laser for transmitter and 1310nm PIN+TIA for receiver	1000BASE
41	PA-SP28-25B-E-C	Single Mode Fiber	SFP28	24.3Gb/s to 26.5Gb/s	<40km	- 25GBASE Ethernet - CPRI10	- 1310nm	25GBASE
42	PA-SP28-25B-E-I	Single Mode Fiber	SFP28	24.3Gb/s to 26.5Gb/s	<40km	- 25GBASE Ethernet - CPRI10	- 1310nm	25GBASE
43	PA-SP28-25B-S-C	Multi Mode Fiber	SFP28	28Gb/s	100m on 9/125 MMF (50/125um OM4) - 70m over M5E - 20m over M5F MMF (50/125um OM2)	- 25GBASE SR Ethernet - 100G Base - Sr4 single lane - Other optical links	- 850nm	25GBASE
44	PA-SP28-25B-S-I	Multi Mode Fiber	SFP28	28Gb/s	100m on 9/125 MMF (50/125um OM4) - 70m over M5E - 20m over M5F MMF (50/125um OM2)	- 25GBASE SR Ethernet - 100G Base - Sr4 single lane - Other optical links	- 850nm	25GBASE
45	PA-SFP28B2325BLI	Single Mode Fiber	SFP28	25.78Gb/s	10km on 9/125 SMF	- 25GBASE-LR - 5G fronthaul eCPRI	- 1270nm	25GBASE
46	PA-SFP28B25B-LWEE	Single Mode Fiber	SFP28	25.78Gb/s	<30km	- 25GBASE-LR - CPRI option 10 and eCPRI	from 1277.89nm to 1309.14nm	25GBASE
47	PA-CSFPB53-2CH-1000B-20-I	Single Mode Fiber	CSFP	1.25Gb/s	<20km	- 1000BASE-BX - Point to Point FTTH Application - Switched Backplane Applications - Router/Server Interface - Switch to Switch Interface - Other Optical Links	- 1550nm TX, 1310nm RX	1000BASE
48	PA-SFPB34(43)-1000B-20-C(I)	Single Mode Fiber	SFP	1.25Gb/s	<20km	- 1000BASE-BX - Gigabit Ethernet BIDI - Fiber Channel - Router, Hubs or Repeaters	- 1310 nm FP Laser for transmitter and 1490 nm PIN+TIA for receiver - 1490nm DFB Laser for transmitter and 1310nm PIN+TIA for receiver	1000BASE
49	PA-SFPB34(43)-1000B-E-E-C(I)	Single Mode Fiber	SFP	1.25Gb/s	<40km	- 1000BASE-BX - Gigabit Ethernet BIDI - Fiber Channel - Router, Hubs or Repeaters	- 1310 nm DFB Laser for transmitter and 1490 nm PIN+TIA for receiver - 1490nm DFB Laser for transmitter and 1310nm PIN+TIA for receiver	1000BASE
50	PA-SFPB34(43)-1000B-L-L-C(I)	Single Mode Fiber	SFP	1.25Gb/s	<10km	- 1000BASE-BX - Gigabit Ethernet BIDI - Fiber Channel - Router, Hubs or Repeaters	- 1310 nm DFB Laser for transmitter and 1490 nm PIN+TIA for receiver - 1490nm DFB Laser for transmitter and 1310nm PIN+TIA for receiver	1000BASE