

# Apticom Transceivers Product Guide



How can we light up your day?

Product Family	Ethernet	OTN	Multi-Rate	Form Factor	Max. Data Rate	Media Type	Wavelength	Transmitter	Receiver	Reach	Max. Case Temp. Range	Connector	Note(s)
800G Direct Detect 100G/A	2x 400GBase VR4			QSFP	850 Gb/s PAM4	Parallel MMF	850nm	8xVCSEL	8xPIN	50m	0 to 70°C	Dual MPO-12	
	2x 400GBase SR4			QSFP	850 Gb/s PAM4	Parallel MMF	850nm	8xVCSEL	8xPIN	100m	0 to 70°C	Dual MPO-12	
	2x 400GBase FR4			QSFP-DD / OSFP	850 Gb/s PAM4	2x Dual SMF	CWDM 1310nm Band	8xVCSEL	8xPIN	20m	0 to 70°C	2x Dual LC	
	2x 400GBase DR4			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	8xVCSEL	8xPIN	500m	0 to 70°C	Dual MPO-12	
	2x 400GBase DR4-2			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	8xVCSEL	8xPIN	20m	0 to 70°C	Dual MPO-12	
	2x 400GBase DR4-10			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	8xVCSEL	8xPIN	10km	0 to 70°C	2x Dual LC	
	2x 400GBase LR4			QSFP-DD / OSFP	850 Gb/s PAM4	2x Dual SMF	CWDM 1310nm Band	8xVCSEL	8xPIN	10km	0 to 70°C	2x Dual LC	
	800G VR4-2			QSFP-DD	850 Gb/s PAM4	Parallel MMF	850nm/910nm	8xVCSEL	8xPIN	50m	0 to 70°C	MPO-12 APC	
	800GBase-VR8			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel MMF	850nm	8xVCSEL	8xPIN	50m	0 to 70°C	MPO-16	
	800GBase-SR8			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel MMF	850nm	8xVCSEL	8xPIN	100m	0 to 70°C	MPO-16	
800G Direct Detect 200G/A	800GBase-VR4			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel MMF	850nm	4xVCSEL	4xPIN	50m	0 to 70°C	MPO-12	
	800GBase-DR4			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	500m	0 to 70°C	MPO-12	
	800GBase-DR4-2			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	20m	0 to 70°C	MPO-12	
	800GBase-VR4			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel MMF	850nm	4xVCSEL	4xPIN	50m	0 to 70°C	MPO-12	
	800GBase-DR4			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	500m	0 to 70°C	MPO-12	
	800GBase-DR4-2			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	20m	0 to 70°C	MPO-12	
	800GBase-VR4			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel MMF	850nm	4xVCSEL	4xPIN	50m	0 to 70°C	MPO-12	
	800GBase-DR4			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	500m	0 to 70°C	MPO-12	
	800GBase-DR4-2			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	20m	0 to 70°C	MPO-12	
	800GBase-VR4			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel MMF	850nm	4xVCSEL	4xPIN	50m	0 to 70°C	MPO-12	
800G Direct Detect LPO	2x 400GBase FR4			QSFP-DD / OSFP	850 Gb/s PAM4	2x Dual SMF	CWDM 1310nm Band	8xVCSEL	8xPIN	20m	0 to 70°C	2x Dual LC	29
	2x 400GBase DR4			QSFP-DD / OSFP	850 Gb/s PAM4	Parallel SMF	1310nm	8xVCSEL	8xPIN	500m	0 to 70°C	Dual MPO-12	29
400G Proprietary Coherent	400G QSFP-DD OpenZR+ High Power			QSFP-DD	425 Gb/s PAM4	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	1800km	0 to 70°C	LC	28
	400G QSFP-DD Open ROADM High Power			QSFP-DD	425 Gb/s PAM4	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	1600km	0 to 70°C	LC	28
400G Standard Coherent	400G QSFP-DD ZR			QSFP-DD / OSFP	425 Gb/s PAM4	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	120km	0 to 70°C	LC	15
	400G QSFP-DD OpenZR+			QSFP-DD / OSFP	425 Gb/s PAM4	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	600km	0 to 70°C	LC	23
	400G QSFP-DD OpenZR+ High Power			QSFP-DD / OSFP	425 Gb/s PAM4	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	600km	0 to 70°C	LC	23
	400G CPFP DCO ZR			CPFP	425 Gb/s PAM4	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	120km	0 to 70°C	LC	15
	400G CPFP DCO ZR			CPFP	425 Gb/s PAM4	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	120km	0 to 70°C	LC	15
400G Direct Detect	400GBase-SR8			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel MMF	850nm	8xVCSEL	8xPIN	100m	0 to 70°C	MPO-16	
	400GBase-VR4			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel MMF	850nm	8xVCSEL	8xPIN	30m	0 to 70°C	MPO-12	
	400GBase-DR4-2			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel MMF	850nm/910nm	8xVCSEL	8xPIN	50m	0 to 70°C	MPO-12/APC	
	400GBase-DR4			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	500m	0 to 70°C	MPO-12/APC	
	400GBase-DR4+ (4xFR1)			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	20m	0 to 70°C	MPO-12/APC	
	400GBase-DR4+ (4xFR1)			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	10km	0 to 70°C	MPO-12/APC	
	400GBase-DR4+ (4xFR1)			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	20m	0 to 70°C	MPO-12/APC	
	400GBase-DR4+ (4xFR1)			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	20m	0 to 70°C	MPO-12/APC	
	400GBase-DR4+ (4xFR1)			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	20m	0 to 70°C	MPO-12/APC	
	400GBase-DR4+ (4xFR1)			QSFP-DD/OSFP	425 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	20m	0 to 70°C	MPO-12/APC	
200G Direct Detect	2x 100GBase-CWDM4			QSFP-DD	2x 103.1 Gb/s	Dual SMF	CWDM 1310nm Band	2x(4xVCSEL LD)	2x(4xPIN)	20m	0 to 70°C	CS	
	2x 100GBase-40WDM-10			QSFP-DD	2x 103.1 Gb/s	Dual SMF	CWDM 1310nm Band	2x(4xVCSEL LD)	2x(4xPIN)	20m	0 to 70°C	CS	
	200GBase-LR4			QSFP-DD	212.5 Gb/s	Dual SMF	LAN-WDM 1310nm Band	4xLAN-WDM LD	4xPIN	10km	0 to 70°C	CS	
	2x 100GBase-LR4			QSFP-DD	212.5 Gb/s	Dual SMF	LAN-WDM 1310nm Band	2x(4xLAN-WDM LD)	2x(4xPIN)	10km	0 to 70°C	CS	
	200GBase-ER4			QSFP-DD	212.5 Gb/s	Dual SMF	LAN-WDM 1310nm Band	4xLAN-WDM LD	4xPIN	10km	0 to 70°C	CS	
	200GBase-SR4			QSFP56	212.5 Gb/s PAM4	Parallel MMF	850nm	4xVCSEL	4xPIN	100m	0 to 70°C	MPO-12	
	200GBase-DR4			QSFP56	212.5 Gb/s PAM4	Parallel SMF	1310nm	4xVCSEL	4xPIN	500m	0 to 70°C	MPO-12	
	200GBase-VR4			QSFP56	212.5 Gb/s PAM4	Dual SMF	CWDM 1310nm Band	4xVCSEL	4xPIN	20m	0 to 70°C	LC	
	200GBase-DR4			QSFP56	212.5 Gb/s PAM4	Dual SMF	CWDM 1310nm Band	4xVCSEL	4xPIN	10km	0 to 70°C	LC	
	200GBase-DR4 10km			QSFP56	212.5 Gb/s PAM4	Dual SMF	CWDM 1310nm Band	4xVCSEL	4xPIN	10km	0 to 70°C	LC	
100G Proprietary Coherent	2x 100G CPFP DCO			CPFP	2x 111.8 Gb/s	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	up to 2000km	0 to 70°C	LC	14, 15
	100G CPFP DCO			CPFP	111.8 Gb/s	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	up to 2000km	0 to 70°C	LC	15
100G Standard Coherent	100G CPFP DCO ZR			CPFP	103.1 Gb/s	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	up to 80km	0 to 70°C	LC	
	100G QSFP28 DCO			QSFP28	103.1 Gb/s	Dual SMF	C-Band DWDM	Tunable Tx	Coherent Rx	> 80km	0 to 70°C / 40 to 85°C	LC	26
100G Direct Detect	100GBase-VR4			QSFP28	111.8 Gb/s	Parallel MMF	850nm	4xVCSEL	4xPIN	100/300m	0°C to 70°C	MPO-12	
	100GBase-SR4			QSFP28	103.1 Gb/s	Parallel MMF	850, 880, 910, 940nm	4xVCSEL	4xPIN	100m	0°C to 70°C	LC	
	100GBase-PSM4			QSFP28	103.1 Gb/s	Parallel SMF	1310nm	4xVCSEL	4xPIN	500m	0°C to 70°C	MPO-12	
	100GBase-SR-Bid			QSFP28	103.1 Gb/s	Dual MMF	850/900nm	2xVCSEL	2xPIN	70m	0°C to 70°C	LC	
	100GBase-CWDM4			QSFP28	103.1 Gb/s	Dual SMF	CWDM 1310nm Band	4xVCSEL	4xPIN	20m	0°C to 70°C	LC	
	100GBase-4WDM-10			QSFP28	103.1 Gb/s	Dual SMF	CWDM 1310nm Band	4xVCSEL	4xPIN	10km	-40 to 85°C	LC	
	100GBase-4WDM-20			QSFP28	103.1 Gb/s	Dual SMF	LAN-WDM 1310nm Band	4xLAN-WDM LD	4xPIN	20km	0 to 85°C	LC	17
	100GBase-VR4 Lite			QSFP28	103.1 Gb/s	Dual SMF	LAN-WDM 1310nm Band	4xLAN-WDM LD	4xPIN	100km	0 to 85°C	LC	16, 17, 19
	100GBase-VR4 Lite (SW)			QSFP28	103.1 Gb/s	Dual SMF	LAN-WDM 1310nm Band	4xLAN-WDM LD	4xPIN	40km	0°C to 70°C	LC	9, 17
	100GBase-VR4 Lite (SW)			QSFP28	103.1 Gb/s	Dual SMF	LAN-WDM 1310nm Band	4xLAN-WDM LD	4xPIN + SOA	40km	0°C to 70°C	LC	9, 17, 22
100G Single Lambda	100GBase-DR1			QSFP28	103.1 Gb/s	Dual SMF	1310nm	CWDM LD	PIN	500m	0°C to 70°C	LC	
	100GBase-VR1			QSFP28	103.1 Gb/s	Dual SMF	1310nm	CWDM LD	PIN	20m	0°C to 70°C	LC	
	100GBase-ER1			QSFP28	103.1 Gb/s	Dual SMF	1310nm	CWDM LD	PIN	20m	0°C to 70°C	LC	
	100GBase-ER1			QSFP28	103.1 Gb/s	Dual SMF	1309.14nm	LAN-WDM	APD	40km	0°C to 70°C	LC	
	100GBase-ER1			QSFP28	103.1 Gb/s	Dual SMF	1309.14nm	LAN-WDM	APD	20km	0°C to 70°C	LC	
	100GBase-VR1			QSFP28	103.1 Gb/s	Dual SMF	1310nm	CWDM LD	PIN	500m	0°C to 70°C	LC	
	100GBase-VR1			QSFP28	103.1 Gb/s	Dual SMF	1310nm	CWDM LD	PIN	20m	0°C to 70°C	LC	
	100GBase-VR1			QSFP28	103.1 Gb/s	Dual SMF	1310nm	CWDM LD	PIN	20m	0°C to 70°C	LC	
	100GBase-VR1			QSFP28	103.1 Gb/s	Dual SMF	1310nm	CWDM LD	PIN	20m	0°C to 70°C	LC	
	100GBase-VR1			QSFP28	103.1 Gb/s	Dual SMF	1310nm	CWDM LD	PIN	20m	0°C to 70°C	LC	
100G Bidi Direct Detect	100G LR4 Bidi			QSFP28	103.1 Gb/s	Single SMF	LAN-WDM 1310nm Band	EML	4xPIN	10km	0 to 70°C / 40 to 85°C	LC	25
	100G 4WDM-20 Bidi			QSFP28	103.1 Gb/s	Single SMF	LAN-WDM 1310nm Band	EML	4xPIN	20km	0 to 70°C / 40 to 85°C	LC	25
	100G 4WDM-40 Bidi			QSFP28	103.1 Gb/s	Single SMF	LAN-WDM 1310nm Band	EML	4xPIN	40km	0 to 70°C / 40 to 85°C	LC	25
	100G LR4 Bidi			QSFP28	103.1 Gb/s	Single SMF	LAN-WDM 1310nm Band	EML	4xPIN+SOA	80km	0 to 70°C / 40 to 85°C	LC	25
	100G LR4 Bidi			QSFP28	103.1 Gb/s	Single SMF	LAN-WDM 1310nm Band	EML	4xPIN+SOA	80km	0 to 70°C / 40 to 85°C	LC	25
100G Single Lambda Bidi Direct Detect	100G LR1 Bidi			QSFP28	106.2 Gb/s	Single SMF	1270/1330nm	EML	PIN	10km	0 to 70°C / 40 to 85°C	LC	
	100G ER1 Bidi			QSFP28	106.2 Gb/s	Single SMF	1270/1330nm	EML	PIN	30km	0 to 70°C / 40 to 85°C	LC	
	100G ER1 Bidi			QSFP28	106.2 Gb/s	Single SMF	1304.58/1309.14nm	EML	APD	30km	0 to 70°C	LC	
	100G ER1 Bidi			QSFP28	106.2 Gb/s	Single SMF	1304.58/1309.14nm	EML	APD	40km	0 to 70°C	LC	
	100G ER1 Bidi			QSFP28	106.2 Gb/s	Single SMF	1304.58/1309.14nm	EML	APD	40km	0 to 70°C	LC	
100G Direct Detect Legacy	100GBase-LR4			CPFP	111.8 Gb/s	Dual SMF	LAN-WDM 1310nm Band	4xEML	4xPIN	10km	0°C to 70°C	LC	
	100GBase-ER4			CPFP	111.8 Gb/s	Dual SMF	LAN-WDM 1310nm Band	4xEML	4xPIN+SOA	40km	0°C to 70°C	LC	
50G Direct Detect	50GBase-FR			SFP56	53.125 Gb/s PAM4	Dual SMF	1310nm	DFB	PIN	20m	0 to 70°C / 40 to 85°C	LC	24
	50GBase-SR			SFP56	53.125 Gb/s PAM4	Dual SMF	1310nm	DFB	PIN	20m	0 to 70°C / 40 to 85°C	LC	