

100G 10km, 20km & 40km 4x25G NRZ WDM Optical Specifications Proposal, Draft 01

Specification	10km WDM4-10 w/ FEC 40G LR4 loss	10km WDM4-10 w/ FEC 100G LR4 loss	20km WDM4-20 w/ FEC	40km WDM4-40 w/ FEC
Rate \pm 100 ppm Gb/s	25.78125	25.78125	25.78125	25.78125
Reach km (RX type)	10 (PIN)	10 (PIN)	20 (PIN)	40 (APD)
Electrical I/O (informative)	CAUI-4 (CL83E)	CAUI-4 (CL83E)	CAUI-4 (CL83E)	CAUI-4 (CL83E)
FEC	RS-528 (CL91)	RS-528 (CL91)	RS-528 (CL91)	RS-528 (CL91)
BER (max)	5e-5 (CL91)	5e-5 (CL91)	5e-5 (CL91)	5e-5 (CL91)
λ Grid	CWDM (CL87)	CWDM (CL87)	LWDM (CL88)	LWDM (CL88)
ER dB (min)	3	3.5	4.0	4.5
TX OMA dBm (max)	3.0	3.0	4.5	6.3
Delta TX power any two lanes dB (max)	4	4	4	4
TX OMA dBm (min)	-4.0	-4.0	-1.3	0
TDP (max) dB	3.0	3.0	2.3	2.5
TX OMA –TDP (min) dBm	-5.0	-5.0	-2.3	-1
Loss Budget (max) dB	6.7	6.3	10.6	18
SRS OMA (max) dBm	-9.3	-8.9	-11.1	-17.2
Rx Sens (max) dBm	-11.7	-11.3	-12.9	-19