

IEEE history on 10 km and 40km PMD interoperation

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Observation on IEEE and industry history around 10 km reaches

		2km	10km	40km
25GbE	Single λ	-	Single λ	Single λ ¹
50 GbE	Single λ	Single λ	Single λ	Single λ
100GbE	Single λ	Single λ	Single λ	Single λ ²
	4 λ	CWDM	LAN WDM CWDM	LAN WDM
200 GbE	4 λ	CWDM	LAN WDM	LAN WDM
400GbE	4 λ	CWDM	CWDM	LAN WDM
	8 λ	LAN WDM	LAN WDM	LAN WDM

Notes:

¹ tighter wavelength range

² tighter spectral width

IEEE Specification

MSA Specification

Observations:

- IEEE 802.3 has history of grouping technical solutions between reaches for leverage and economy of scale
- Lowest cost solution always used for highest volume reach (2km)
 - That solution generally extended to max reach possible
- History of grouping 10km & 40km when 2km solution not practical for those reaches (100G and 200G)
- No history of separate solutions for each reach