

Activate™ PCS - Bandwidth/Power Product Optimization Chart

100 MBp/s Optimized	48VDC - Receiving End				Power Distance (ft)				Data Distance (ft)		
	Amps	Watts-PS	Watts-PD	mA	18AWG	16AWG	14AWG	12AWG	OM3 (MM)	OM4 (MM)	OS2 (SM)
	0.3125	15.4	12.95	350	1300	1730	2740	5200	6500	6500	32800
	0.625	30	25.5	600	800	900	1400	3200	6500	6500	32800
	1.25	60	51	600x2	400	450	700	1600	6500	6500	32800

1 Gbp/s Optimized	48VDC - Receiving End				Power Distance (ft)				Data Distance (ft)		
	Amps	Watts-PS	Watts-PD	mA	18AWG	16AWG	14AWG	12AWG	OM3 (MM)	OM4 (MM)	OS2 (SM)
	0.3125	15.4	12.95	350	1300	1730	2740	5200	2600	3281	32800
	0.625	30	25.5	600	800	900	1400	3200	2600	3281	32800
	1.25	60	51	600x2	400	450	700	1600	2600	3281	32800

10 GBp/s Optimized	48VDC - Receiving End				Power Distance (ft)				Data Distance (ft)		
	Amps	Watts-PS	Watts-PD	mA	18AWG	16AWG	14AWG	12AWG	OM3 (MM)	OM4 (MM)	OS2 (SM)
	0.3125	15.4	12.95	350	1300	1730	2740	5200	980	1640	32800
	0.625	30	25.5	600	800	900	1400	3200	980	1640	32800
	1.25	60	51	600x2	400	450	700	1600	980	1640	32800

Twisted Pair	50VDC - Source				Power Distance (ft)				Data Distance (ft)		
	Amps	Watts-PS	Watts-PD	mA	24AWG	23AWG	22AWG	Activate™ uTP	Size	1Gbps	10Mbps
PoE (802.3af)	0.308	15.4	12.99	308	850	1050	1300	1700	24AWG (Cat 5E)	328	328
PoE+ (802.3at)	0.600	30	25.5	600	400	500	625	800	23AWG (Cat 6 or 6A)	328	328
PoE++ (802.3bt Type 3)	1.2 (2 Prs)	60	51	600x2	400	500	625	800	21AWG (Activate™ uTP™)	656	850
PoE++ (802.3bt Type 4)	2.0 (2 Prs)	100	71	1000 x 2	460	575	725	950		750	950

** Power distances are calculated based on Ohms Law. Your systems' equipment may include programing to limit voltage, amperage, and/or circuit resistance and so effectively limiting the distance between the PSE and the PD. Such limitations may be in observation of IEEE 802 criteria as interpreted by the equipment manufacturer or by their specification.