

Inspired LED — 24V Standard LED Power Requirements

July 20, 2026 · Calculated at 80% max transformer load

24V Power Requirements

Power Source	Mega Bright 240ohm 2.4 W/ft	Mega Bright 100ohm 5.5 W/ft	Centra Bright 3.75 W/ft
20W LinDrive Dimmable Transformer (SKU 3942)	80" (6.7 ft) 16.0W load	35" (2.9 ft) 16.0W load	51" (4.3 ft) 16.0W load
40W E-Series Dimmable Transformer (SKU 3936)	160" (13.3 ft) 32.0W load	70" (5.8 ft) 32.0W load	102" (8.5 ft) 32.0W load
40W LinDrive Dimmable Transformer (SKU 3943)	160" (13.3 ft) 32.0W load	70" (5.8 ft) 32.0W load	102" (8.5 ft) 32.0W load
40W Magnetic Dimmable Transformer (SKU 3944)	160" (13.3 ft) 32.0W load	70" (5.8 ft) 32.0W load	102" (8.5 ft) 32.0W load
48W (2 AMP) Plug-In Power Supply	192" (16.0 ft) 38.4W load	84" (7.0 ft) 38.4W load	123" (10.2 ft) 38.4W load
60W E-Series Dimmable Transformer (SKU 3937)	240" (20.0 ft) 48.0W load	105" (8.7 ft) 48.0W load	154" (12.8 ft) 48.0W load
60W LinDrive Dimmable Transformer (SKU 8552)	240" (20.0 ft) 48.0W load	105" (8.7 ft) 48.0W load	154" (12.8 ft) 48.0W load
60W Magnetic Dimmable Transformer (SKU 3878)	240" (20.0 ft) 48.0W load	105" (8.7 ft) 48.0W load	154" (12.8 ft) 48.0W load
90W Mean Well Direct-Wire Driver (SKU3768)	360" (30.0 ft) 72.0W load	157" (13.1 ft) 72.0W load	230" (19.2 ft) 72.0W load
96W (4 AMP) Plug-In Power Supply	384" (32.0 ft) 76.8W load	168" (14.0 ft) 76.8W load	246" (20.5 ft) 76.8W load
96W EMCOD 5-in-1 Universal Driver (SKU 8624)	384" (32.0 ft) 76.8W load	168" (14.0 ft) 76.8W load	246" (20.5 ft) 76.8W load
96W E-Series Dimmable Transformer (SKU 3579)	384" (32.0 ft) 76.8W load	168" (14.0 ft) 76.8W load	246" (20.5 ft) 76.8W load
96W Magnetic Dimmable Transformer (SKU 3938)	384" (32.0 ft) 76.8W load	168" (14.0 ft) 76.8W load	246" (20.5 ft) 76.8W load
150W Mean Well Direct-Wire Driver (SKU 3693)	600" (50.0 ft) 120.0W load	262" (21.8 ft) 120.0W load	384" (32.0 ft) 120.0W load
150W Magnetic Dimmable Transformer (SKU 3748)	600" (50.0 ft) 120.0W load	262" (21.8 ft) 120.0W load	384" (32.0 ft) 120.0W load
200W EMCOD 5-in-1 Universal Driver (SKU 8625)	800" (66.7 ft) 160.0W load	349" (29.1 ft) 160.0W load	512" (42.7 ft) 160.0W load

Power Source	Mega Bright 240ohm 2.4 W/ft	Mega Bright 100ohm 5.5 W/ft	Centra Bright 3.75 W/ft
200W Magnetic Dimmable Transformer (SKU 3941)	800" (66.7 ft) 160.0W load	349" (29.1 ft) 160.0W load	512" (42.7 ft) 160.0W load
240W Mean Well Direct-Wire Driver (SKU 3886)	960" (80.0 ft) 192.0W load	419" (34.9 ft) 192.0W load	614" (51.2 ft) 192.0W load
300W EMCOD 5-in-1 Universal Driver (SKU 8626)	1200" (100.0 ft) 240.0W load	524" (43.6 ft) 240.0W load	768" (64.0 ft) 240.0W load
300W Magnetic Dimmable Transformer (SKU 3759)	1200" (100.0 ft) 240.0W load	524" (43.6 ft) 240.0W load	768" (64.0 ft) 240.0W load
320W Mean Well Direct-Wire Driver (SKU 3769)	1280" (106.7 ft) 256.0W load	559" (46.5 ft) 256.0W load	819" (68.3 ft) 256.0W load

Please refer to voltage drop measurements below.

Voltage Drop for MB240: individual runs over 420" may show visible voltage drop. Power long runs from the center; maximum recommended single-run length is 840".

Voltage Drop for MB100: individual runs over 240" may show visible voltage drop. Power long runs from the center; maximum recommended single-run length is 480".

Voltage Drop for Centra Bright: individual runs over 240" may show visible voltage drop. Power long runs from the center; maximum recommended single-run length is 480".

Power Source Load: for best performance and longevity, transformers/drivers are run at no more than 80% of rated capacity.

Please Note: power requirements shown are conservative estimates for general reference. Actual results may vary by system configuration. For assistance with complex systems, contact orders@inspiredled.com or design@inspiredled.com.