



**Colour
is our nature**

50W DMX Full-Colour (RGBW) Dimmable LED Drivers

Input characteristics

Input voltage AC	120-250V (ENEC) 120-277V (UL)
Input voltage DC	120-250V
Input current	0.7A max
Input frequency	50-60Hz
Efficiency @ full load	89%
Efficiency @ 2/3 load	≥85%
Power factor @ full load	>0.9
THD @ full load	<20%
Inrush current	30mA ² s @ 277V
Surge protection	1kV DM, 2kV CM
Standby power	<0.5W

Output characteristics

LED output power	50W max
Programmable LED output current range	200-1,050mA
LED output current resolution	programmable in 10mA steps
LED output current tolerance	+/- 5% at programmed LED output current
LED outputs	4 (UL Class 2)
LED output voltage range	2-55V

Control characteristics

Control channels	4
Dimming protocol	DMX / RDM
Dimming range	100%-0%
Dimming method	Hybrid HydraDrive
Dimming curve	linear, logarithmic, square
Driver configuration	with TOOLbox pro and FluxTool software

Protection

LED output short	yes
LED output cross short	yes
Overload	yes
Reverse polarity	yes, for LED output
Restart after protection	yes

Product offering



POWERdrive 561/M

P/N: PW0561M1

POWERdrive AC, 50W, DMX, 4 control channels, constant current, 4x 55V outputs, long metal



POWERdrive 561/A

P/N: PW0561A1

POWERdrive AC, 50W, DMX, 4 control channels, constant current, 4x 55V outputs, square metal/plastic



POWERdrive 561/S

P/N: PW0561S1

POWERdrive AC, 50W, DMX, 4 control channels, constant current, 4x 55V outputs, square metal

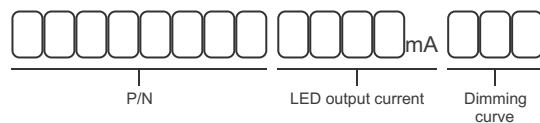


Wiring harness (accessory)

P/N: WH0081S1

Wiring harness, 8pin Molex, DMX, POWERdrive 561/S or 561/A

Order number configuration



P/N: for LED driver part number, see 'Product offering' above.

LED output current: in 10mA steps, e.g. "0260", "1010", etc.

Dimming curve: enter "LOG" for logarithmic, "LIN" for linear, or "SQU" for square dimming curve.

Note: WH0081S1 is the ready-made counterpart for the molex connector on the POWERdrive 561/S and 561/A which must be ordered separately if required.

Dimensions, weight and packaging

POWERdrive 561/M

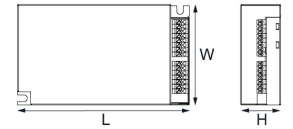
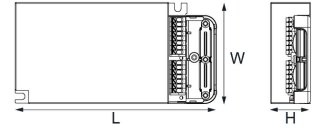
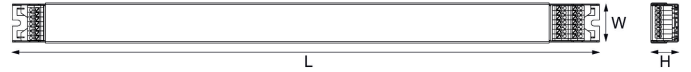
LxWxH	444x29.9x21mm / 17.48x1.18x0.83in
Weight	360 g / 12.7 oz
Items per carton	8 or 28 pcs

POWERdrive 561/A

LxWxH	152.5x76x30.1mm / 6x2.99x1.19in
Weight	372 g / 13.12 oz
Items per carton	6 or 45 pcs

POWERdrive 561/S

LxWxH	130x76x30mm / 5.12x2.99x1.18in
Weight	350 g / 12.35 oz
Items per carton	6, 10 or 45 pcs



Standards and certifications

Standards compliance

EN	61347-1/-2-13, 62384, 55015, 55022, 61000-3-2, 61547
FCC	47 CFR Part 15 class B
RoHS	RoHS2
UL, Recognized Component	UL 1310, UL 8750 (Class 2 output)

Certifications



Remark: only PW0561M1 is RCM certified

Wiring Specifications

Wire type	AWG 20-16, 0.5-1.5mm ² solid or stranded copper
Wire strip length	9mm / 0.35in
WH0081S1 wire colors	LEDcode/NTC: brown (-), yellow (+) DMX out: black (shield), black-blue (-), black-white (+) DMX in: black (shield), blue (-), white (+)

Thermal protection

External NTC thermistor	throttling @ 70 °C / 158 °F (settable)
External thermistor value	47kΩ
Recommended thermistors	238164063473 (leaded) NTCASCWE3473J (screw)

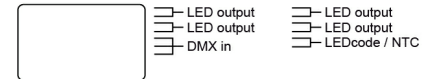
Warranty

Warranty period	3 years
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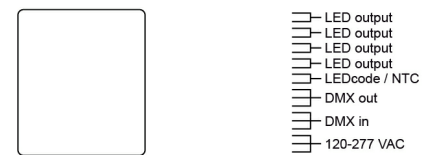
Wiring diagrams

POWERdrive 561/M

120-277 VAC



POWERdrive 561/A, 561/S



Thermal specification

Ta operating range	-20 °C ... +50 °C / -4 °F ... +122 °F
Tc max	85 °C / 185 °F
Tc lifetime	561/S, 561/M: 78 °C / 172.4 °F 561/A: 72 °C / 161.6 °F

Maximum loading of automatic circuit breakers

Automatic circuit breaker type	B10	B13	B16	C10	C13	C16
Amount of LED drivers	14	18	22	14	18	22