



**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 <sup>2</sup> 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

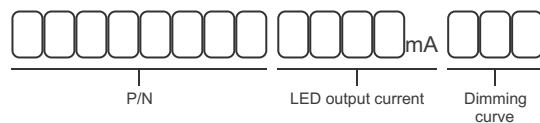


#### Wiring harness (accessory)

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

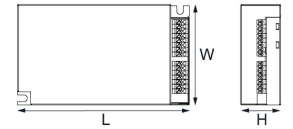
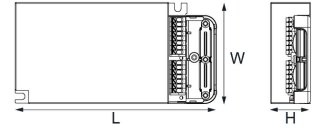
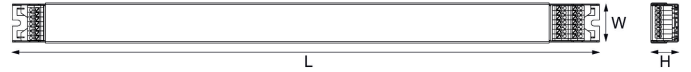
LxWxH	444x29.9x21mm / 17.48x1.18x0.83in
Weight	360 g / 12.7 oz
Items per carton	8 or 28 pcs

### 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 <sup>2</sup> 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)

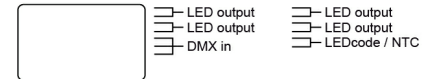
## Warranty

Warranty period	3 years
-----------------	---------

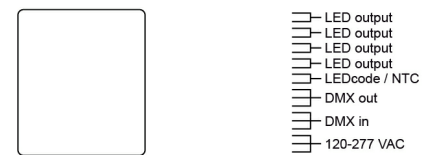
## Wiring diagrams

### 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