

PHILIPS

Xitanium 60 W

0.15-0.5A 220V IA21 230V



Specification Sheet

Xitanium 60 W

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Xitanium non-isolated DALI drivers are ideal for High Voltage (HV) linear systems and stand on four pillars: quality of light, reliability, flexibility and wireless control connectivity.

By using Xitanium LED drivers in your luminaires, you can be sure to offer your customers high quality of light without visual flicker and stroboscopic effects. The reliability of our drivers is based on in-depth electronics knowledge and extensive testing.

Finally, application-oriented operating windows offer the flexibility required to provide the stable lumen output and light quality levels that lighting specifiers and architects demand.

Xtanium 60 W

Features

- Configurable operating windows (AOC) via SimpleSet (MultiOne)
- Adjustable Light Output (ALO)
- Constant Light Output (CLO)
- Dimming supported during DC operation (DCemDim)
- Energy Reporting

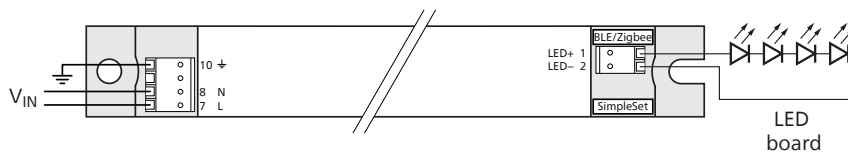
Benefits

- High quality of light
- High reliability
- Future-proof flexibility
- Flicker and noise free dimming due to amplitude modulation dimming (AM)
- Interact Ready

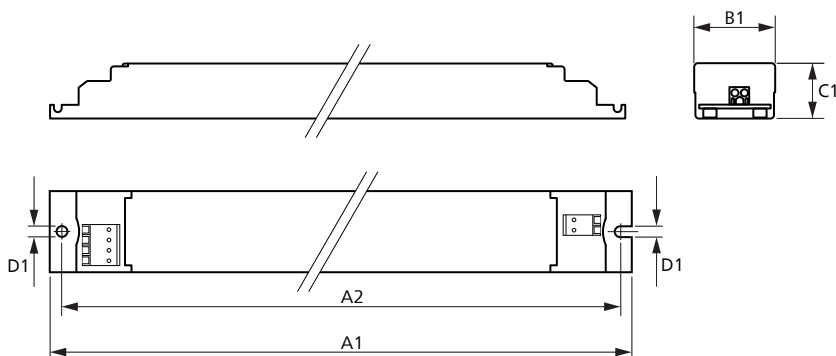
Applications

- Offices
- Healthcare
- Education
- Indoor parking areas
- Retail: supermarkets, shopping malls
- Industry

Wiring diagram



Dimensional drawing



Specifications

Physical information

Length (A1)	280 mm (11.0 in)
Mounting hole distance (A2)	270 mm (10.6 in)
Width (B1)	30 mm (1.18 in)
Height (C1)	21 mm (0.83 in)
Mounting hole diameter (D1)	4.1 mm (0.16 in)
Weight	0.180 kg (6.67 oz)
Input wire cross-section (solid conductor wire)	0.5 to 1.5 mm ² (AWG-20 to AWG-16)
Input wire strip length	8 to 9 mm (0.31 to 0.35 in)
Output wire cross-section (solid wire cross-section)	0.5 to 1.5 mm ² (AWG-20 to AWG-16)
Output wire strip length	8 to 9 mm (0.31 to 0.35 in)
Maximum cable length	2 m (6.56 ft) total length of the wiring including LED module, one way. For longer wiring verify the EMI behavior of the luminaire.

Environmental data

Ambient temperature	-25 to +50 °C (-13 to +122 °F), higher ambient temperature allowed as long as $T_{\text{case-max}}$ is not exceeded
$T_{\text{case-max}}$	75 °C (167 °F), lifetime 50 000 hours
$T_{\text{case-life}}$	65 °C (149 °F), measured at T_c point
$T_{\text{housing-max}}$	110 °C (230 °F), In case of a failure, inherent by design
Operating relative humidity	10 to 90%, non condensing
Storage temperature	-25 to +85 °C (-13 to +185 °F)
Storage relative humidity	5 to 95%, non condensing

Electrical input data

Rated input voltage range	220 to 240 V _{ac}
Nominal rated input voltage	230 V _{ac}
Nominal rated input frequency	50 to 60 Hz
Rated input current	0.3 A; at rated output power and rated input voltage
Rated input power	66 W; at rated output power and rated input voltage
Power factor	0.9; at rated output power and rated input voltage
Total harmonic distortion	20%; at rated output power and rated input voltage
Dimming range	1 to 100% with absolute minimum output current 3.3 mA
Efficiency	92%; at rated output power and rated input voltage
Rated input voltage DC	186 to 250 V _{dc} ; nominal range
Input voltage AC range	198 to 264 V _{ac} ; operational range
Input frequency AC range	45 to 66 Hz; operational range
Input voltage DC range	168 to 275 V _{dc} ; operational range

Electrical output data

Regulation method	Constant current
Output voltage	50 to 220 V _{dc}
Maximum output voltage	250 V (rms)
Output current	0.15 to 0.50 A
Minimum programmable output current	0.150 A
Minimum dimming output current	3.3 mA; dimming via Zigbee
Output current tolerance	±5%
Output current ripple LF	≤ 4%; ripple = peak / average, < 2 kHz
Output P _{st} ^{LM}	≤ 0.5
Output SVM	≤ 0.5
Output power	17 to 60 W

Inrush current data

I _{peak} inrush current	19 A, input voltage 230 V
T _{width} inrush current	230 μs, input voltage 230 V measured at 50% I _{peak}
Drivers per circuit breaker 16 A type B	≤ 24 pcs, indicative value

Lifetime

Driver lifetime	100 000 hours, measured temperature at T _{case} -point is T _{case-life} . Maximum failures = 10%
Number of ON/OFF switches	> 100 000

Insulation per IEC61347-1

Between input and output LED board combination	none
Housing	basic to in- and output

Driver touch current / protective conductor current

Typical peak touch current (ins. Class II)	0.5 mA, Acc. IEC60598-1. LED module contribution not included
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Surge immunity

Mains surge immunity (diff. mode)	1 kV, L- N Acc. IEC61000-4-5 2 Ohm, 1.2/50 μs, 8/20 μs
Mains surge immunity (comm. mode)	2 kV, L/N - PE Acc. IEC61000-4-5 12 Ohm, 1.2/50 μs, 8/20 μs

Electrical data controls input

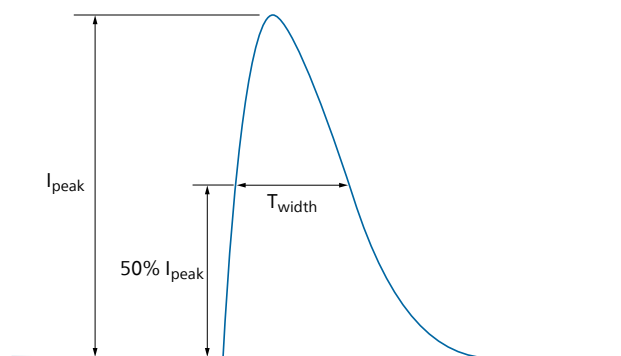
Control method	Wireless, Zigbee and BLE
Dimming range	1 to 100%

Compliance

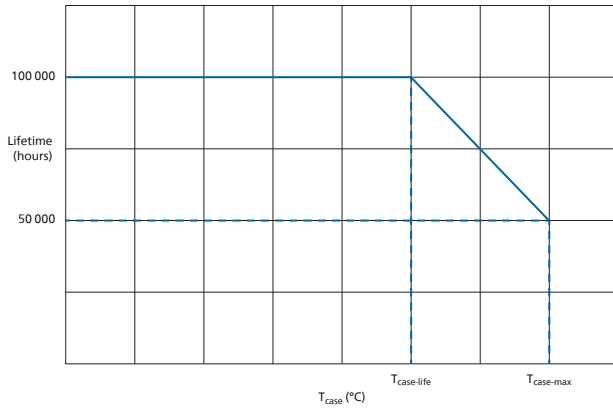
IP rating	IP20
Approbations	CE, UKCA, RoHS, ENEC, CCC



Inrush current



Lifetime



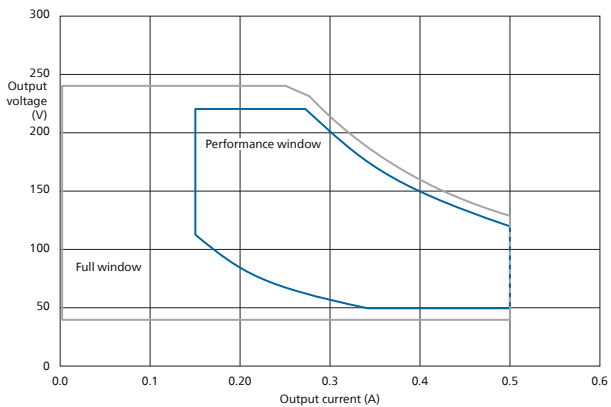
Programmable features

Item	Available	Default setting	Condition
Set Adjustable Output Current (AOC)	SimpleSet, Wireless	150 mA	
Constant Light Output (CLO)	✓	OFF	
Adjustable Light Output (ALO)	✓	OFF	
DALI 253 M	✓		
Minimum dimming level	✓	1%	
DC emergency (DCemDim)	✓	ON	Default 15%, EOFx range = 1 to 100% (EOFx = DCemDIM level)
OEM Write Protection (OWP)	✓	OFF	
Luminaire Info	✓		
T_x power	✓	10 dBm	

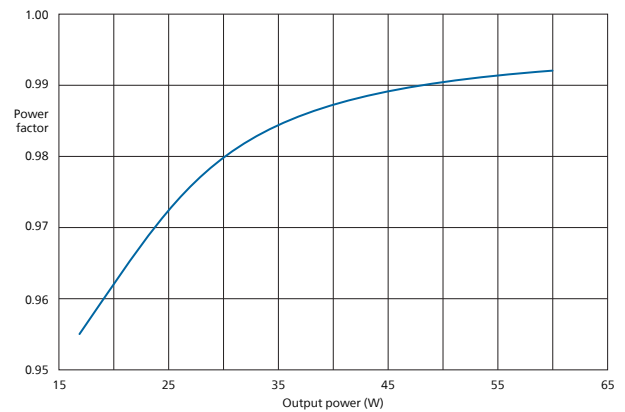
Features

Open load protection	✓		Automatic recovering
Short circuit protection	✓		Automatic recovering
Over power protection	✓		Automatic recovering
Hot wiring	—		
Suitable for fixtures with protection class	I		per IEC60598
Output overvoltage detection	✓		
Energy metering	✓		accuracy 4%

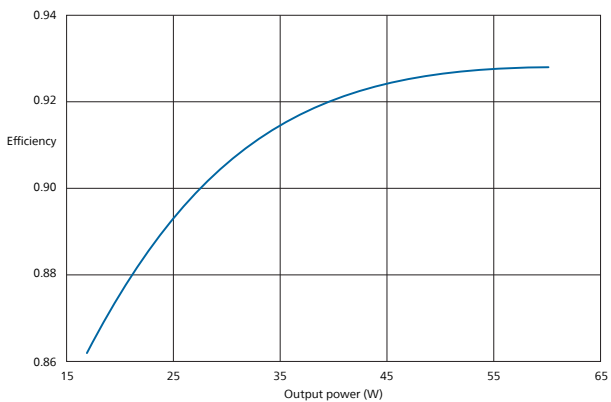
Operating window



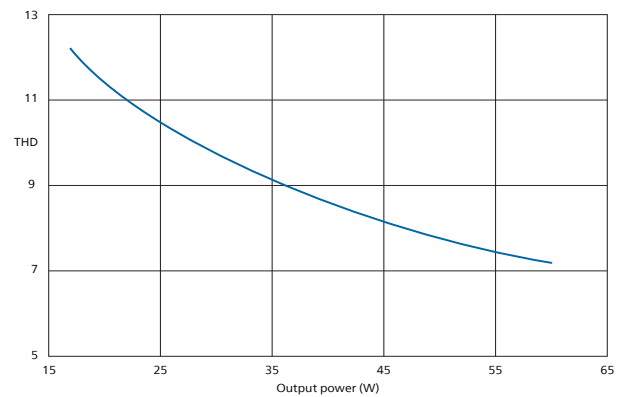
Power factor versus output power



Efficiency versus output power



THD versus output power



Ordering Data

Type

MOQ Order code

Xitanium 60W 0.15-0.5A 220V IA21 230V

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