

Xitanium 36 W/m

0.15-1.05A 48V IA 230V



Specification Sheet

Xitanium 36 W/m 0.15-1.05A 48V IA 230V

Xitanium Mini wireless LED drivers are designed to operate LED solutions for general lighting applications. They enable simple, cost effective wireless lighting system for energy saving and comfort. Advanced design of the Mini wireless drivers helps to build a simple, scalable and standardized connected lighting with different functionalities from simple wireless dimming to cloud based operations and integration with gateways. With Xitanium LED drivers, flexibility in luminaire design is assured thanks to the Adjustable Output Current (AOC). Application-oriented operating windows offer stable lumen output and light quality levels that specifiers and architects demand. The adjustable output current also enables operation of various LED PCB solutions from different manufacturers.

Xitanium 36 W/m

Features

- Wide operating window: With extended operating window, availability of a wide output current from 0.15 to 1.05 A that also helps complexity management.
- Wide range of power ratings.
- Traditional Mini design which can be used both as a built-in driver and an independent driver with add on caps.

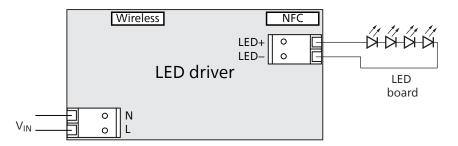
Benefits

- Enabling simple, scalable and standardized connected lighting system
- High reliability underpinned by 5 year warranty
- Future-proof flexibility application-oriented operating windows enable LED generation and complexity management
- Compatibility can also be used for modules or OEM own PCB designs from other manufacturers.

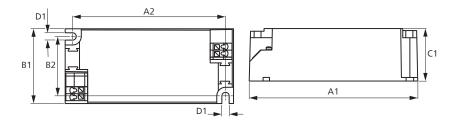
Applications

- Retail
- Hospitality
- Office

Wiring diagram



Dimensional drawing



Specifications

| Physical information | | | |
|--|--|--|--|
| Length (A1) | 97.2 mm (3.83 in) | | |
| Mounting hole distance (A2) | 88.5 mm (3.48 in) | | |
| Width (B1) | 43 mm (1.69 in) | | |
| Height (C1) | 30 mm (1.18 in) | | |
| Mounting hole diameter (D1) | 4.2 mm (0.17 in) | | |
| Weight | 0.088 kg (3.10 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 | 0.6 m (1.97 Ft) | | |

Environmental data

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

Electrical input data Rated input voltage range 220 to 240 V_{ac} Rated input voltage 230 V_{ac} Nominal rated input frequency 50 to 60 Hz Rated input current 0.20 A; at maximum output power and rated input voltage Max. input current 0.22 A; at rated output power, at minimum performance input voltage

| voltage | |
|---|--|
| 42 W; at rated output power and rated input voltage | |
| 0.9; at rated output power and rated input voltage | |
| 20%; at rated output power and rated input voltage | |
| 88%; at maximum output power and rated input voltage | |
| 186 to 250 V _{dc} ; performance range | |
| ≤ 0.23 A _{dc} | |
| 198 to 264 V _{ac} ; operational range | |
| 47.5 to 63.0 Hz; operational range | |
| 168 to 275 V _{dc} ; operational range | |
| 0.5 W | |
| SELV | |
| | |

Electrical output data

| Regulation method | Constant current |
|--|---|
| Output voltage | 24 to 48 V _{dc} |
| Maximum output voltage | 60 V _{dc} (rms) |
| Output current | 0.15 to 1.05 A |
| Minimum programmable output current | 0.150 A |
| Minimum dimming output current | 0.005 A |
| Output current tolerance | ±5% |
| Output current ripple LF | ≤ 4%; ripple = peak / average, < 3 kHz |
| Output current ripple HF | ≤ 4% |
| Output P _{st} ^{LM} | ≤ 1 |
| Ouput SVM | ≤ 0.5 |
| Rated output power | 6 to 36 W |

Inrush current data

| I _{peak} inrush current | 4.8 A, input voltage 230 V |
|--|---|
| T _{width} inrush current | 56 μs, input voltage 230 V measured at 50% I _{peak} |
| Drivers per circuit breaker 16 A type B | ≤ 50 pcs, indicative value |

Lifetime

| Driver lifetime | 50 000 hours, measured temperature at T _{case} -point is |
|-----------------|--|
| | T _{case-life} . Maximum failures = 10% |

Driver touch current / protective conductor current

| Typical peak touch current | 0.7 mA, Acc. IEC61347-1. LED |
|----------------------------|------------------------------|
| (ins. Class II) | module contribution not |
| | included |

Surge immunity

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

Electrical data controls input

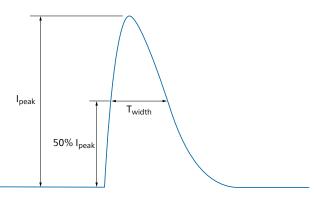
| Control method | Wireless, Zigbee, dimming is possible through the RF interface |
|----------------|--|
| Dimming range | 1 to 100% |

Compliance

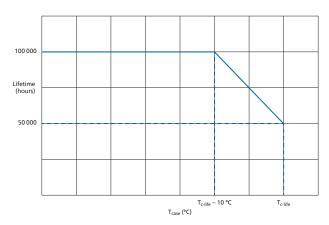
| IP rating | IP20 |
|--------------|---|
| Approbations | CE, UKCA, RoHS, ENEC, CCC, RCM, KC, TISI |

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Inrush current



Lifetime

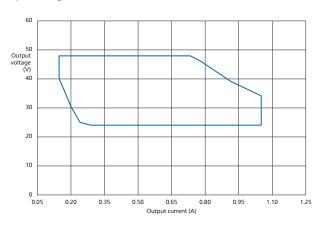


Programmable features

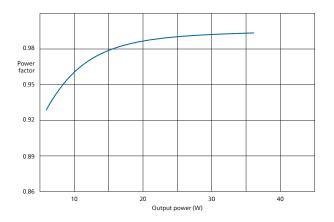
| Item | Available | Default setting | Condition |
|--|-----------|-----------------|-------------------------------------|
| Set Adjustable Output Current (AOC) | SimpleSet | 150 mA | |
| Constant Light Output (CLO) | ✓ | OFF | |
| Adjustable Light Output (ALO) | ✓ | OFF | |
| Adjustable Light Output (ALO) min level | ~ | OFF | |
| Minimum dimming level | ✓ | 1% | |
| DC emergency (DCemDim) | ✓ | ON | Default 15% |
| Dimming support at DC operating | ~ | OFF | |
| OEM OverWrite Protection (OWP) | ~ | OFF | |
| T _x power | ✓ | 8 dBm | Set the Zigbee T _x power |
| Features | | i | 1 |
| | | | |

| Open load protection | ✓ | Automatic recovering |
|---|----------|----------------------|
| Short circuit protection | ✓ | Automatic recovering |
| Over power protection | ✓ | Automatic recovering |
| Hot wiring | - | |
| Suitable for fixtures with protection class | I and II | per IEC60598 |
| Energy metering | ✓ | 4% accuracy |
| Diagnostics | ✓ | |

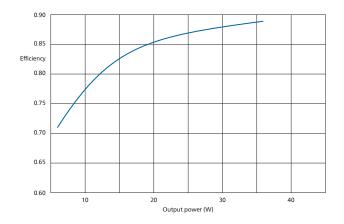
Operating window



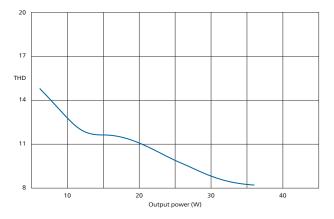
Power factor versus output power



Efficiency versus output power



THD versus output power



Ordering Data

| Туре | MOQ | Order code |
|---------------------------------------|-----|----------------|
| Xitanium 36W/m 0.15-1.05A 48V IA 230V | 40 | 9290 021 02506 |

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