

## LED Driver

### Xitanium

20W 0.1-0.56A 54V 0-10V INT

(1% dim) with SimpleSet

XI020C056V054BST2



Intertek  
Class P  
Conforms to UL STD 8750  
Certified to CAN/CSA STD  
C22.2 No. 250.13



UL Class 2  
For Dry and  
Damp Location



**RoHS**  
COMPLIANT

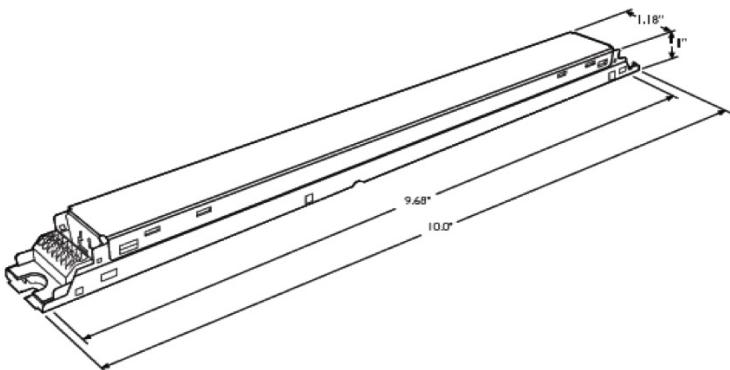
The Philips Advance Xitanium range of linear LED drivers is designed to provide OEMs with ultimate flexibility. These models are compatible with standard 0-10V dimming systems to deliver reliably smooth dimming performance down to a minimum of 1%. Enabled with SimpleSet technology, these drivers offer the needed flexibility and performance for the application with precise tuning of drive currents, selectable dimming curves and adjustable minimum dimming levels. With wide operating windows, slim profile and simple current adjustability, the drivers make it easy for luminaire manufacturers to design downlight fixtures with desired lumen levels to suit the application.

#### Specifications

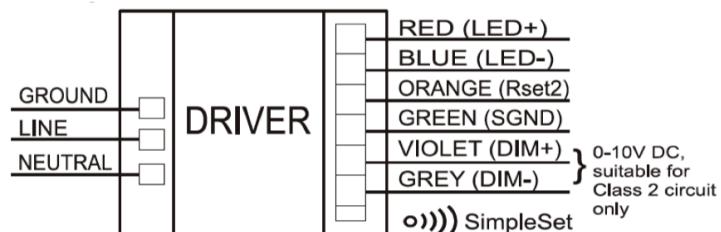
| Input Voltage (Vac) | Output Power (W) | Output Voltage (V) | Output Current (A) | Efficiency@ Max Load and 75°C Case | Max Case Temp. (°C)  | Input Current (A) | Max. Input Power (W) | THD @ Max Load (%) | Power Factor @ Max Load | Surge Protection (Combi-Wave, KV) | Envir. Protection Rating |
|---------------------|------------------|--------------------|--------------------|------------------------------------|----------------------|-------------------|----------------------|--------------------|-------------------------|-----------------------------------|--------------------------|
| 120                 | 20               | 22.5 - 54          | 0.1 - 0.56         | 83                                 | Life-75°C<br>UL-80°C | 0.21              | 26                   | <10%<br><10%       | >0.95                   | 2.5                               | UL damp & dry            |
| 277                 |                  |                    |                    | 85                                 |                      | 0.1               |                      |                    |                         |                                   |                          |

#### Enclosure

|                 | In. (mm)    |
|-----------------|-------------|
| Case Length     | 10.0 (254)  |
| Case Width      | 1.18 (30)   |
| Case Height     | 1.00 (25.4) |
| Mounting Length | 9.68 (246)  |



#### Wiring Diagram



#### WARNING:

Install in accordance with National and Local Electrical Codes. Use 18 AWG Solid Copper Wire. Rated >=300V. Strip Wire 3/8".

#### GROUNDING:

Driver case must be grounded.

| Dimming                     | Dimming Range (with specified dimmers)         | Minimum Output Current (A) | Other Comments                 |
|-----------------------------|--|----------------------------|--------------------------------|
| 0-10V Analog Class 2 Wiring | 1% ~ 100% (for output current range 0.1-0.56A) | 0.001                      | Dimming source current: 150 µA |

# 20W 0.1-0.56A 54V 0-10V INT (1% dim) with SimpleSet

## Features

- 50,000+ hour lifetime<sup>1</sup>
- SimpleSet programmable
- Large operating window
- 1% minimum dim level

## Benefits

- Slim profile housing enables easy design-in with excellent thermal performance
- Enables simple, fast, flexible application-specific configurations
- Enables fixture designs with comprehensive application coverage for various loads and lumen levels

## Application

- Indoor linear applications such as troffers and pendants
- Office
- Education
- Healthcare
- Retail

## Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

## Product Data

### Order Information

|                                |  |
|--------------------------------|--|
| Full Product Code              | XI020C056V054BST2M (Mid-Pack, 18pcs/Box), 12NC: 929000754913 |
| Line Frequency                 | 50/60Hz  |
| Min. Mains Voltage Operational | 108 Vac  |
| Max. Mains Voltage Operational | 305 Vac  |

### Output Information

|   |   |
|---|---|
| Maximum Open Circuit Voltage                                  | < 60Vdc   |
| Output Current Ripple<br>(ripple = peak to average / average) | 15% max @ max Iout<br>4% max @ Visible for stroboscopic frequency range 60Hz-3KHz |
| Output Current Tolerance<br>(in the performance window)       | <5%   |
| Protections   | Short Circuit, Open Circuit Protection for LED + and LED -                        |

### Features

|   |   |
|---|---|
| 0-10V Dimming                                 | 150µA source current from driver. See dim curve for detail.   |
| AOC (Adjustable Output Current)               | 100mA to 560mA via external resistor or SimpleSet programming (refer to graph and notes below)  |
| Additional SimpleSet<br>Configurable Features | Adjustable minimum dimming level,<br>Dimming curve selection (linear or logarithmic),<br>Adjustable output level,<br>Adjustable output min,<br>OEM write protection |

### Environment & Approbation

|                               |   |
|-------------------------------|---|
| Operating Ambient Temp. Range | -20°C to +55°C  |
| Max Case Temperature (Tcase)  | 80°C  |
| Agency Approbations           | UL8750, UL1310, CSA-C22.2 No. 25013-12, CSA Class P, ETL Class P, UL TL |
| Electromagnetic Compliance    | FCC Title 47 Part 15 Class A  |
| Audible Noise                 | <24dB Class A   |
| Weight                        | 0.48 Lbs / 0.22 kgs   |

1. Philips Advance Xitanium LED drivers are manufactured to engineering standards correlating to a designed and average life expectancy of 50,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTBF modeling.

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## Electrical Specifications

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### 0-10V Dimming Curve

Dimming source current from the driver: 150µA (@ 0<Vdim<8V)

Minimum dim level: 1% of Iout (minimum 1mA)

Maximum output voltage on the dimming wires: 12V

## Approved Dimmer List

| Manufacturer | Manufacturer Part Number  |
|--------------|---|
| Lutron       | Visit <a href="http://www.lutron.com/advance">www.lutron.com/advance</a> for a list of dimmers (Mark VII) that will work with this driver |
| Leviton      | IllumaTech IP7 series   |
| Philips      | Sunrise - SR1200ZTUNV   |

