



PHILIPS

LED

InteGrade Fixture



The perfect fit

Philips InteGrade LED fixture system – compact linear LED lighting for standard-size display case (3 and 4 foot)

The InteGrade LED fixture system is an energy-efficient way¹ to create an enjoyable shopping experience. Thanks to its compact dimensions, the fixture can be aesthetically integrated below and inside shelves, e.g., in a store interior or refrigerated cabinet. Asymmetrical optics direct the light where you want it, thus making optimum use of the light and energy. The products or background you want lit will be presented uniformly, with reduced glare and dark spots. Our LEDs have minimal output degradation and color shift, so the light remains consistent throughout their long lifetime. InteGrade LED is an ideal solution for high-quality lighting without flicker or color differences. The fixture consists of a profile with InteGrade LED engines and inline locks. Mounting accessories, cables and LED power driver are available separately.

Key benefits

- Excellent total cost of ownership
 - Energy savings of up to 65%¹
- Aesthetic integration of LED lighting, enables seamless light lines with uniform light distribution
 - Supurb asymmetrical optics
- Easy to install: the fixtures have standard dimensions and fit most commonly used shelves
 - InteGrade cabling allows connection to own connector system
- Dimmable
 - Use with available Philips Advance Xitanium LED dimming controller for 0-10V dimming
- Philips 5-year limited system warranty²
 - InteGrade LED fixture in combination with Philips cables and Philips Advance LED power driver

Applications

- Shelf Lighting:
 - Supermarkets
 - Libraries
 - Refrigerated cabinets
 - Museums
 - Retail



InteGrade LED fixture system

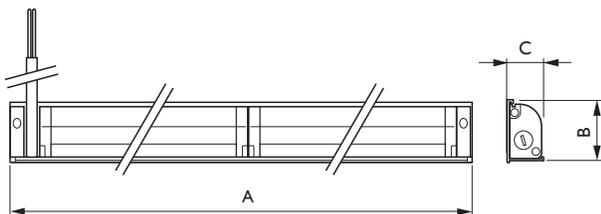
The InteGrade LED engine system consists of different components that are designed and marketed together, as we believe good system design is crucial to effective functioning of the system and facilitates an easy design-in. The system includes InteGrade LED engines, Philips Advance Xitanium LED drivers and mounting accessories.

Specifications

- The rated average life of the engines, in combination with a Philips Advance LED power driver, is B50L70 at 50,000 hours (70% lumen maintenance).³ This rated average life is based on engineering data testing and probability analysis.
- Operating temperature (performance) min -30 °C / max +30 °C.
- Storage temperature min -30 °C / max +60 °C.
- Housing color: aluminum.
- Safety Extra Low Voltage (SELV); safety is ensured even if wiring or units become damaged (only when a SELV rated power supply is used).
- Compliance and approval: ENEC⁴, UL⁵, CE⁶, RoHS⁷ and EU directive 2002/95/EC.
- The fixtures are suitable for the described applications on condition of typical use in damp and dry locations.

Dimensions InteGrade LED engines

InteGrade LED Engines	Dimensions (Inches)		
	A	B	C
InteGrade LED Fixture Value 875mm (34")	34.8	0.9	0.5
InteGrade LED Fixture Value 1175mm (46")	46.4	0.9	0.5



Simple installation

The InteGrade LED fixture comprises a profile with one or more LED engines, one or more connectors and inline locks. The power cable and driver have to be ordered separately.

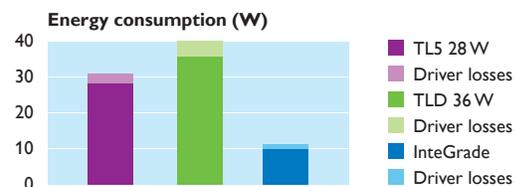
Installation advice

We advise you to consult our website for the latest up-to-date information and important detailed installation instructions. See http://www.lighting.philips.com/us_en/connect/LED_modules/inteGrade-LED-systems.wpd.



Energy savings

Energy savings are a major benefit of the InteGrade LED engines compared to TL5 and TL-D systems.





Xitanium constant voltage outdoor driver 80W



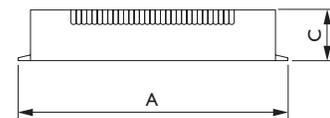
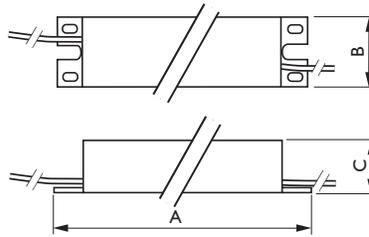
Xitanium constant voltage outdoor driver 20W

Xitanium LED power driver

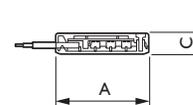
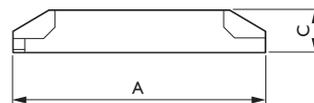
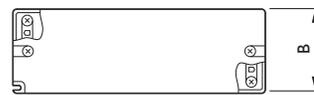
We have developed Xitanium constant voltage LED power drivers of 20 and 80W 24V, which are ideal for powering the InteGrade LED engines. See ordering table at the last pages. To allow for variance in the installation, we recommend you do not load the power driver beyond 90% of its rated maximum power. Please refer to the wiring diagram in the installation guide for more details.

Dimensions Xitanium LED power driver

LED Power Driver	Dimensions (Inches)		
	A	B	C
Xitanium Constant Voltage Outdoor LED Power Driver 20W - 24V	150	37	27
Xitanium Constant Voltage Outdoor LED Power Driver 80W - 24V	241	43	30
Xitanium Constant Voltage LED Power Driver 75W-24V PP ItG-N Plug	180	60	31



Xitanium constant voltage outdoor driver 75W-24V PP



Accessories

Power cables

The power cables are available in different lengths and colors (black and white). They are easy to connect to the engines and the driver. Specific details can be found in the design-in guide available on our website.

Mounting clips, connector and lock

There are two mounting clips available:

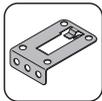
- Shelf arm mounting clip.
- Under shelf mounting clip.

These clips can be easily clicked onto the InteGrade LED fixture.

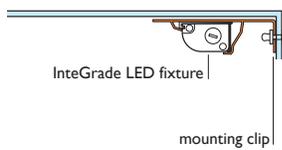
Spare parts

The connector and inline lock are already included in the LED fixture. The connector is used to electrically connect two LED engines. The inline lock fixes the engine in its profile.

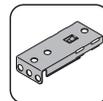
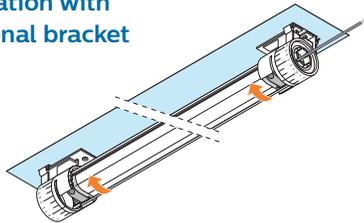
Installation Examples



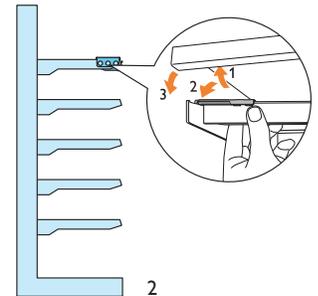
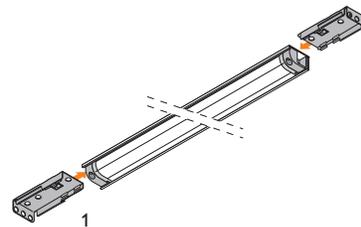
Installation of a LED fixture with mounting clip



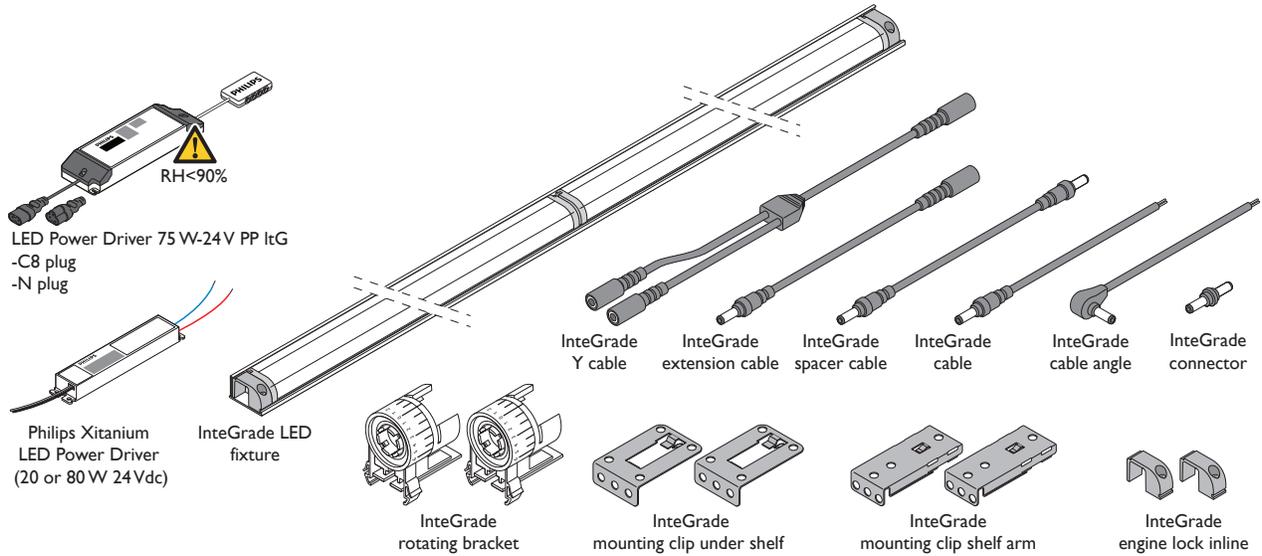
Installation with rotational bracket



Installation example with shelf-arm mounting clip



Ordering details for InteGrade LED fixture system



Wattage and lighting characteristics InteGrade LED fixture⁸

	Color Temp (K) ⁹	Wattage (W) ¹⁰	Approx. Lumens ^{11,12}	CRI ¹³	Ordering Code
Value Plus Range (Regular Lumen Output)					
InteGrade LED Fixture Value 875mm (34") 830	3000	8	600	85	929000645913
InteGrade LED Fixture Value 875mm (34") 835	3500	8	600	85	929000655513
InteGrade LED Fixture Value 875mm (34") 840	4100	8	600	85	929000645713
InteGrade LED Fixture Value 1175mm (46") 830	3000	10	800	85	929000646013
InteGrade LED Fixture Value 1175mm (46") 835	3500	10	800	85	929000655613
InteGrade LED Fixture Value 1175mm (46") 840	4100	10	800	85	929000645813
Vision Plus Range (High Lumen Output)					
InteGrade LED Fixture Vision 875mm (34") 830	3000	15	1100	85	929000867913
InteGrade LED Fixture Vision 875mm (34") 835	3500	15	1100	85	929000868513
InteGrade LED Fixture Vision 875mm (34") 840	4100	15	1100	85	929000868013
InteGrade LED Fixture Vision 1175mm (46") 830	3000	20	1500	85	929000868113
InteGrade LED Fixture Vision 1175mm (46") 835	3500	20	1500	85	929000868613
InteGrade LED Fixture Vision 1175mm (46") 840	4100	20	1500	85	929000868213

InteGrade LED engine system drivers, cables, connectors and accessories

	Ordering Code
InteGrade Power Cables – To Connect Engine to Driver	
InteGrade Power Cable 1m (39") Black	929000641014
InteGrade Power Cable 2.5m (98") Black	929000641114
InteGrade Cable 1m (39") Black Angle	929000644614
InteGrade Cable 2.5m (98") Black Angle	929000644814
InteGrade spacer Cable 0.5m (20") Black	929000645014
InteGrade Power Cable 1m (39") White	929000645614
InteGrade Power Cable 2.5m (98") White	929000644514
InteGrade Cable 1m (39") White Angle	929000644714
InteGrade Cable 2.5m (98") White Angle	929000644914
InteGrade Spacer Cable 0.5m (20") White	929000645114
InteGrade Y Cable 0.5m Black	929000874313
InteGrade Extension Cable 1.5m (59") Black	929000874413
Lock-inline – Fix Engine in Profile	
InteGrade Inline Lock	929000643713
Connector – Connect Engine to Engine	
InteGrade Connector	929000959106
Mounting Parts	
InteGrade Mounting Clip Under Shelf	929000643903
InteGrade Mounting Clip Shelf Arm	929000957806
InteGrade Rotating Bracket	929000874613
Power Driver	
Xitanium Constant Voltage Outdoor LED Power Driver 20W – 24V	929000654006
Xitanium Constant Voltage Outdoor LED Power Driver 80W – 24V	929000653906
Xitanium Constant Voltage Outdoor LED Power Driver 75W – 24V PP ItG-N Plug	929000869613

Footnotes

1. When comparing energy consumption of the InteGrade 48" Fixture (10W) with a Philips 28W T5 lamp (28W).
2. View limited warranty at <http://www.usa.lighting.philips.com/support/support/warranty> for details and restrictions.
3. L70 72,000 hours @ 35°C based on TM21 and LM80.
4. The above mentioned product has been certified on the basis of a test type according to the standard EN 62031:2008; EN 6247:2008.
5. Indicates that the LEDs are components recognized with UL and complies with UL8750 Standard for LEDs.
6. CE Declaration of conformity for Safety and Electromagnetic compatibility, Council Directive 2006/95/EC and Council Directive 2004/108/EC respectively.
7. Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electronic products. For products used in North America compliance to RoHS is voluntary and self-certified.
8. Current Specification subject to change, for the latest specifications please contact your local Philips sales representative.
9. Correlated Color Temperature with 6 SDCM range.
10. Power consumption per engine may vary +/- 20%.
11. Photometric testing consistent with LM79.
12. 100% of all production units fall between +/-20% of listed values.
13. All CRI are 80 or above.

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Philips Lighting, North America Corporation
10275 West Higgins Road
Rosemont, IL 60018
Tel: 800-322-2086 Fax: 888-423-1882
Customer Support/Technical Service: 800-372-3331
OEM Support: 866-915-5886