

PARATHOM[®] PRO PAR16 75 advanced

Product description



- Replacement for 50W high efficiency halogen lamp in GU5.3
- High lumen output up to 620lm
- Dimmable down to 10%
- Long lifetime

Product Offering

Type reference	Power	CCT	Beam Angle	CRI
PAR16 75 25 adv 827	10.5W	2700K	25°	80
PAR16 75 25 adv 830	10.5W	3000K	25°	80
PAR16 75 25 adv 765	10.5W	6500K	25°	70
PAR16 75 35 adv 827	10.5W	2700K	35°	80
PAR16 75 35 adv 830	10.5W	3000K	35°	80
PAR16 75 35 adv 765	10.5W	6500K	35°	70

1. Key Features and Benefits

- 10.5W LED lamp as high-quality replacement of 50-75W halogen lamp
- GU10 base
- 220-240V AC input voltage
- Dimmable¹
- available in three different colour temperature:
 - 2700K – warm white
 - 3000K – warm white
 - 6500K – daylight
- high colour consistency: <5 Standard Deviation Colour Matching
- reduces energy consumption up to 86%
- shock-proof and vibration-proof
- 40,000 hours lifetime
- UV and NIR radiation free
- Mercury free
- 5 years Osram Guarantee²

¹ See www.osram.com/dim

² See www.osram.com/guarantee

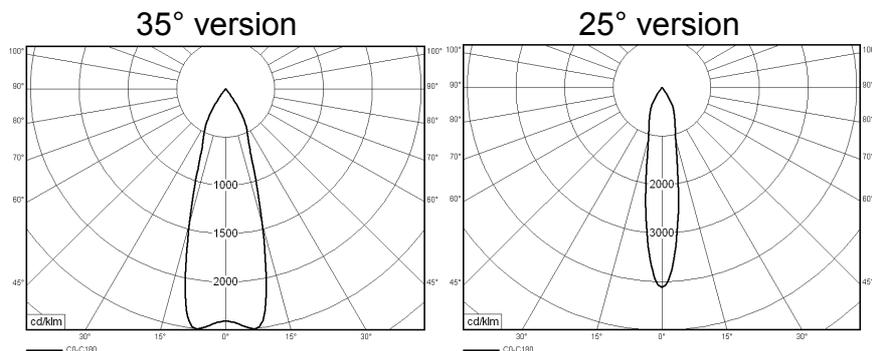
2. Common Characteristics³

Average lifetime ⁴		Switching cycles (30s on, 30s off)		Casing material	Starting time	Warm up time for 60% light	Power factor
40,000h		1,000,000		Metal/plastic	0.0s	none	>0.9
Mercury max.	Base Type	Length	Diameter	Weight	Tc temperature max. ⁵	Nominal current	Max. current
0.0mg	GU10	86mm	50mm	127g	105°C	0.047A	0.075A

3. Characteristic Range³

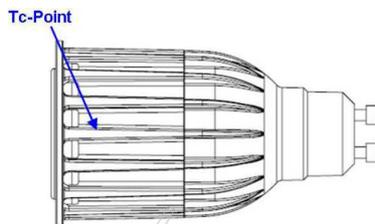
Type reference	Power	Luminous flux	Luminous intensity	Correlated colour temperature	Standard deviation colour matching	Colour rendering index	Beam angle
PAR16 75 25 adv 827	10.5W	450lm	1700cd	2700K	<5	80	25°
PAR16 75 35 adv 827	10.5W	450lm	1100cd	2700K	<5	80	35°
PAR16 75 25 adv 830	10.5W	500lm	1900cd	3000K	<5	80	25°
PAR16 75 35 adv 830	10.5W	500lm	1200cd	3000K	<5	80	35°
PAR16 75 25 adv 765	10.5W	620lm	2500cd	6500K	<5	70	25°
PAR16 75 35 adv 765	10.5W	620lm	1500cd	6500K	<5	70	35°

4. Light distribution curve



5. Mounting information

Good heat exchange supports ideal performance.
Do not use the product in totally enclosed and thermally isolated fixture.



³ Typical values measured at 230V AC. All the technical parameters apply to the entire lamp. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values.

⁴ The average lifetime of LED lamps is defined as the number of hours when the light output of 50% of a large group of identical lamps goes below 70% of its initial luminous flux (L70B50, IEC60969). The lifetime is estimated at room temperature (25°C), free air burning, base up burning position and at rated voltage. To achieve a full lifetime a good heat exchange for the electronic components is required.

⁵ The Tc is defined as the highest permissible temperature which may occur on the outer surface of the LED lamp (in the indicated position) under normal operating conditions and at the rated voltage/current/power or the maximum of the rated voltage/current/power range (DIN EN 62031: 2009-01)

6. Disposal information

WEEE-lamps can be returned at specific collection points.

LED lamps have to be disposed as special waste.



7. Application Information

Applications

- hotels
- restaurant
- commercial areas
- residentials
- art galleries and museum
- office space

Application Notes

1. suitable for indoor application.
2. for outdoor applications and operation in damp locations special approved fixture are required.
3. Operating temperature range between -20°C and 40°C

8. Cost savings: example

Reference product description	Similar halogen product	Watts saved	Cost saved after 1 year	Cost saved after 2 years	Cost saved after 3 years
PAR16 75 35 adv 830	HAL GU5.3 50W high efficiency	39.5	6€	56€	105€

9. Ordering Guide

Type reference	Product Number – 1pcs	Product Number – 1 shipping unit	Number of pcs / ship. unit
PAR16 75 25 adv 827(*)	4008321972873	4008321972880	10
PAR16 75 35 adv 827	4008321972330	4008321972347	10
PAR16 75 25 adv 830(*)	4008321972897	4008321972903	10
PAR16 75 35 adv 830	4008321972354	4008321972361	10
PAR16 75 25 adv 765(*)	4008321972910	4008321972927	10
PAR16 75 35 adv 765(*)	4008321972378	4008321972385	10

(*) Product available on request.

10. Lamp conformity

2004/108/EC Electromagnetic compatibility (EMC)

2009/125/EC Ecodesign requirements for energy related products

2011/65/EC Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

1907/2006 Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Regulation)

2002/96/EC Waste Electrical and Electronic Equipment Directive (WEEE)

EN 62471 Photobiological safety of lamps and lamp systems

IEC/TR 62471-2 Photobiological safety of lamps and lamp systems - Part 2: Guidance on manufacturing requirements relating to non-laser optical radiation safety

EN 55015 Limits and methods of measurement of radio disturbance

EN 61000-3-2 Electromagnetic compatibility – Limits for harmonic current emission

EN 61000-3-3 Electromagnetic compatibility – Limitation of voltage changes, voltage fluctuations, flicker in public low voltage supply systems

EN61547 Electromagnetic compatibility immunity requirements

2006/95/EC Electrical equipment designed for use within certain voltage limits

EN 62560 Self ballasted LED-lamps for general lighting services by voltage >50V - Safety specifications

11. Dimming behaviours ⁶

Status December 2011

Legend	
L / leading edge	T / trailing edge
Y / yes	N / no

Dimming behaviour @ Vin= 230V, 50Hz						
Dimmer info			Number of lamp under test	Dimming range (%)		Note
Brand	Model	Type		Min	Max	
Lichtregler	He T10	L	1	5	100	
Berker	2875	L	1	5	100	
Siemens	5TC8 286	L	1	5	100	
Busch	6517 U-101	L	1	5	100	
Kopp	80,78	T	1	6	100	
Clipsal	32V 500 Series	L	1	6	100	
TCL-Legrand	V8051	L	1	5	100	
T&J	V2C-M2-FWH	L	1	7	100	
Pera/HE	He T46	T	1	9	100	
Pera/HE	He T39.01	L	1	5	100	
Berker	2875	L	1	5	100	
Busch	6519U	T	1	9	100	
Berker	281902	L	1	5	100	
PEHA	B80.433V	L	1	5	100	
GIRA	0300 00/101	L	1	15	100	
GIRA	0307 00/102	T	1	5	100	
Busch	2247U	L	1	5	100	
Busch	6513U-102	T	1	8	100	
Everflourish	EF0700DC	T	1	9	100	
Everflourish	EF0700DA	L	1	5	100	
Everflourish	EFM700DB	L	1	5	100	
Everflourish	EFM700DC	T	1	9	100	
HE	He T10	L	1	5	100	
ELSO	T30	L	1	5	100	
ELSO	ATD315(174200)	T	1	2	100	Flickering at same dimming angle possible
Merten	5771-99	T	1	9	100	
Busch	2200	L	1	8	100	
Busch	2250	L	1	6	100	
Jung	225NV DE	L	1	6	100	
Lichtregler	He T39.01	L	1	6	100	
Busch	6513-102U	T	1	8	100	
Jung	225TDE	T	1	5	100	
Clipsal	32E450T	T	1	3	100	
Clipsal	32E450LM	L	1	6	100	
Clipsal	E30 (32V500M)	L	1	7	100	
Schneider-Clipsal	KB31RD400	L	1	5	100	
Honyar	KT150	L	1	5	100	
TCL-Legrand	M	L	1	5	100	
Clipsal	32V 500 Series	L	1	6	100	

⁶ Typical values.

The test results reflect the measurement of the individual devices that were used in tests. OSRAM does not take over any responsibility, warranty or liability that this results can also be achieved by using the devices under other conditions or when using successor models of the tested devices or different models of the same manufacturer.

The test results were achieved by using the above mentioned LED-lamp types. OSRAM does not take over any responsibility, warranty or liability that this results can also be achieved by using the devices under other conditions or when using other LED-lamp types.

