

OT 320 UNV 1A1 2DIM P7

OPTOTRONIC - 2DIM UNV IP67 | 2DIM/UNV (IP67) – constant current LED drivers



Product family features

- Available with different wattage: 100 W, 150 W, 200 W, 320 W
- Input voltage: 100...277 V
- Flexible current setting with programming tool
- AstroDIM for autonomous dimming
- Constant Lumen Output (CLO)

Product family benefits

- 2DIM functionality in one device (AstroDIM, 1...10 V)
- High surge protection: up to 10 kV
- High efficiency up to 92%
- Great flexibility due to wide operating temperature range of -40...60 °C
- IP rating: IP67

Areas of application

- Street and urban lighting
- Industry
- Suitable for luminaires of protection class I

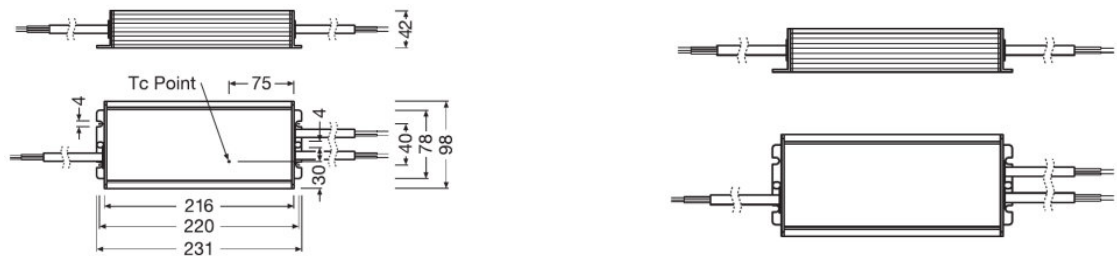
Technical data

Electrical data

Nominal voltage	120...240/277 V
Input voltage AC	90...305 V
Nominal current	150 A
Mains frequency	47...63 Hz
Power factor λ	0.95
Total harmonic distortion	< 10 %
Device power loss	28 W
Inrush current	60 A
Max. ECG no. on circuit breaker 10 A (B)	2
Max. ECG no. on circuit breaker 16 A (B)	3
Max. ECG no. on circuit breaker 25 A (B)	5
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	5 kV
Nominal output power	320 W
Maximum output power	320 W
Efficiency in full-load	92 % ¹⁾
Nominal output current	520...1100 mA
Default output current	700 mA
Output current tolerance	±5 %
Output ripple current (100 Hz)	10 %
Output PSTLM	≤1
Output SVM	≤0.4
Minimum output current	110 mA
Galvanic isolation	double/reinforced
Nominal output voltage	228...457 V
U-OUT (working voltage)	480 V

¹⁾ at 230 V, 50 Hz

Dimensions & weight



Length	2310 mm
Width	980 mm
Height	420 mm
Mounting hole spacing, length	220.0 mm
Mounting hole spacing, width	40 mm
Product weight	170000 g
Cable cross-section, input side	1.0 mm ²
Cable cross-section, output side	1.0 mm ²
Wire preparation length, input side	10 mm
Cable/wire length, output side	300 mm
Cable/wire length, input side	300 mm
Cable/wire length, control input	350 mm

Temperatures & operating conditions

Ambient temperature range	-40...+60 °C ¹⁾
Temperature range at storage	-40...+80 °C
Maximum temperature at tc test point	85 °C
Max.housing temperature in case of fault	110 °C
Permitted rel. humidity during operation	5...85 % ²⁾

¹⁾ Input voltage 200 – 277V, for Input voltage < 200V max. ta = 50°C

²⁾ Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 100000 h ¹⁾
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¹⁾ At maximum T_c = 85°C / 10% failure rate / At maximum T_c = 75°C / 10% failure rate

Capabilities

Dimmable	Yes
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Product datasheet

Dimming interface	2DIM / 1...10 V / AstroDIM
Dimming range	10...100 %
Suitable for fixtures with prot. class	I
Constant lumen function	Programmable
NTC input	No
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m ¹⁾
Number of channels	1

¹⁾ Output wires must be routed as close as possible to each other

Programming

Tuner4TRONIC	No
Programming device	OT PROGRAMMER/5

Certificates & standards

Type of protection	IP67
Standards	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 62386/GB 19510.1/GB 19510.14/GB 17625.1/UL-8750/FCC part 15/SASO 2927:2019
Approval marks – approval	CCC / CE / ENEC / UL

Logistical data

Commodity code	85044083900
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Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	28-04-2023
Primary Article Identifier	4062172158220
Candidate List Substance 1	Lead
CAS No. of substance 1	7439-92-1
Safe Use Instruction	The identification of the Candidate List substance is sufficient to allow safe use of the article.
Declaration No. in SCIP database	850797dd-39c0-411e-9a49-17ccfea642c9

Additional product information

- The driver withstands an input voltage of up to 305 Vac. Shut down of output load might occur in case the supply voltage exceeds the declared input voltage range.
- For short circuit protection the driver automatically switches into hiccup mode and auto recovery. No damage will occur when any output is short circuited. The output shall return to normal when the fault condition is removed.
- The driver automatically switches into protection mode when output voltage exceeds limit and return to normal when the fault condition is removed.
- The constant lumen feature is disabled by default.
- If any output level is below the physical min level, the physical min level will be used.
- External control devices connected to the 1-10V interface shall be double/reinforced insulated.
- For configuration of the product USB Programming Tool OT PROGRAMMER (4062172171632) and Software OPTOTRONIC 2DIM P7 Programming Tool (<https://www.osram.com/ds/tools/software.jsp>) is required.
- Important note: OSRAM products must never be directly exposed to external influences. Always provide adequate protection for relevant applications (covers, housings etc.), otherwise the warranty claim will be invalid.

Download Data

File	
	User instruction OPTOTRONIC UNV 2DIM P7
	Certificates OT 320 2DIMP7 ENEC 50357505 260421
	Certificates OT 320 2DIMP7 EMC 50195033 140720
	Certificates OT UNV 2DIM P7 UL E320395 310321
	Declarations of conformity OT 2DIMP7 CE 4224289 061221
	CAD data OT 320 2DIM UNV P7 STEP 040221

Ecodesign regulation information:

Intended for use with LED modules.

The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

Product datasheet

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172158220	OT 320 UNV 1A1 2DIM P7	Shipping carton box 5	610 mm x 370 mm x 100 mm	22.57 dm ³	9600.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

Accessories Optional

Product description	Accessory name	Accessory code
OT 320 UNV 1A1 2DIM P7	OT PROGRAMMER/5	▶ 4062172171632

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.