

hei SOLAR LIGHT COLUMN

hei lukida 4000 circular P200-160

DATA SHEET

An aesthetic solar light column with an award-winning design, ideal for outdoor lighting applications, where design matters, such as gardens, parks, boulevards.

Light source	6 high-efficiency LEDs
Solar Operating Power (SOP)	20 Watt
Max. luminous flux @ SOP	3,100 lm
Luminaire efficacy	155 lm/W
Nominal power of solar cells	2 x 155 W_p
System Power Ratio (SPR)	10
Autonomy	up to 3 nights (39h)
Pole height	5.0 / 6.0 / 8.0 m
Light spot height	4.92 / 6.92 / 7.92 m

STANDARDS AND COMPLIANCES

ISO	ISO 9001-2015
Illumination	According to EN 13201, IESNA RP-8-00
Light pole	EN 40
IP Rating (Luminaire)	IP66
Power tube impact protection rating	IK06
Photovoltaics	EN 61215 (adapted)
Temperature range	-40 °C to +50 °C (battery in earth pit)
CE	✓
RoHS	✓

GLOBAL WARMING MITIGATION - ENERGY AND CO2 SAVINGS

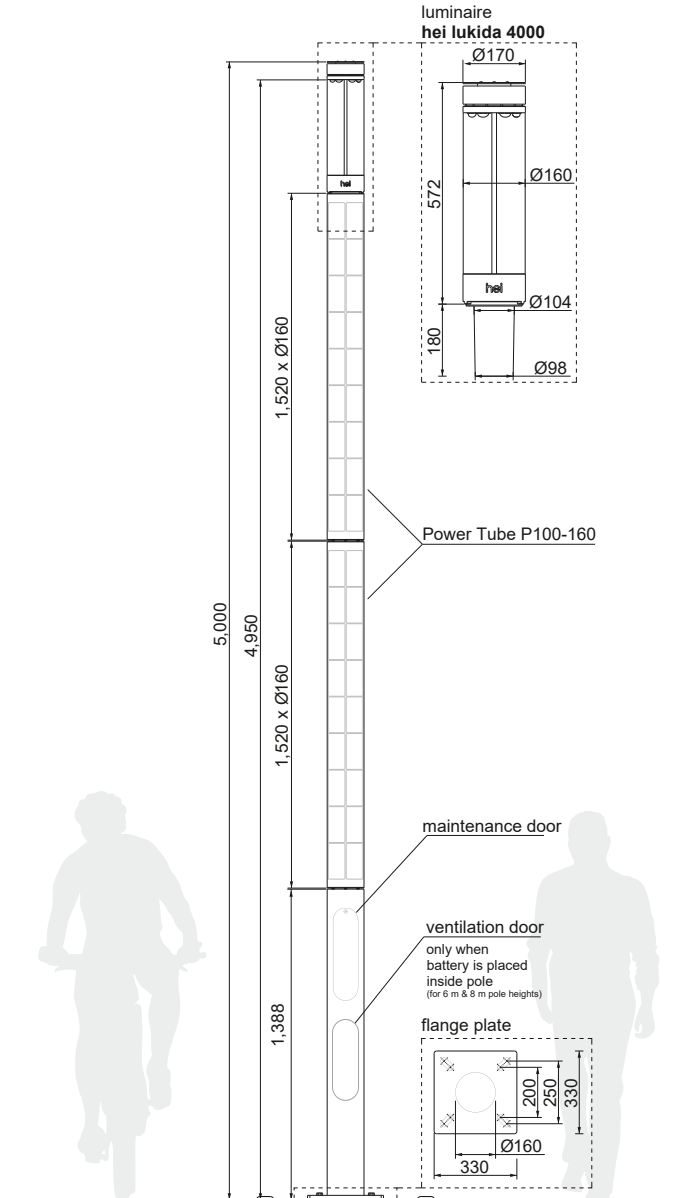
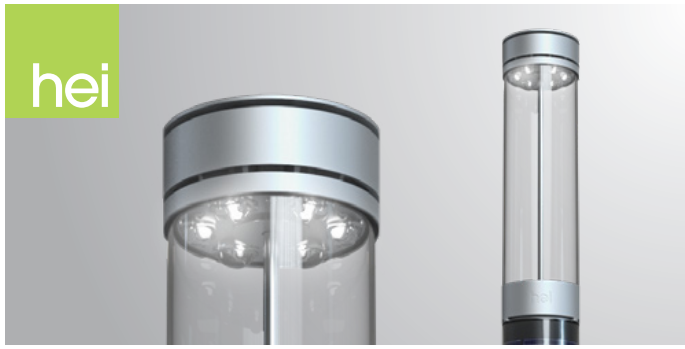
Electrical energy and CO2 emission savings of one solar light pole in 30 years compared to:

Standard cabled LED	3,700 kWh / 1.9 tons CO2
HPS light (100 W)	13,100 kWh / 6.6 tons CO2

Specific CO2 emissions: 0.5 kg per kWh

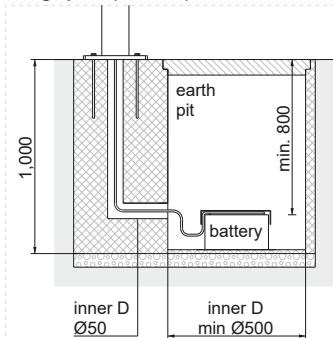
Product innovation award @



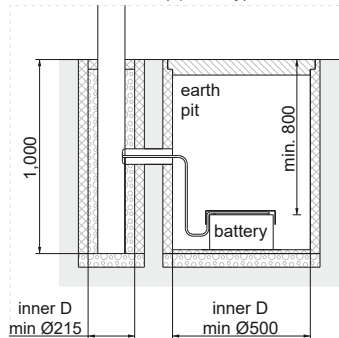


All dimensions are in mm

Flange plate (standard)



Sleeve foundation (optionally)



LUMINAIRE

SOP Solar Operating Power	20 Watt
Max. luminous flux @ SOP	3,100 lm
Luminaire efficacy	155 lm/W
Correlated Colour Temperature (CCT)	5,000 K (cool white) 3,000 K (warm white) - optionally 4,000 K (neutral white) - optionally
Colour rendering index (CRI)	≥ 70
Life time of LEDs (L70/B10)	> 90,000 hours
Material (housing)	Aluminium
Finishing (housing)	Powder-coated Paint-coated RAL 9006 (white aluminium) Powder-coating, other RAL colours - optionally
Weight	7 kg

COLUMN

Wind class acc. EN 40	45 m/s
Pole height	5.0 / 6.0 / 8.0 m
Light spot height	4.92 / 5.92 / 7.92 m
Pole diameter	160 mm
Pole weight	58 / 72 / 100 kg
Foundation	Flange plate Sleeve foundation - optionally
Material	Steel
Finishing	Hot-dip galvanized Paint-coated RAL 9006 (white aluminium) Powder-coating, other RAL colours - optionally
Corrosion class	C4
Other pole heights, bracket lengths, and boom angles optionally.	

POWER TUBE P100-160

No. of Power Tubes	2
Technology	Silicon solar cells
Number of solar cells (array)	2 x 27 pcs (3 strings x 9 pcs / string)
Nominal power of solar cells	2 x 143 W_p
Dimensions (mm)	2 x L1,520 x Ø160 mm
Weight	2 x 7 kg

CONTROL ELECTRONICS

Programmable microcontroller	✓
Location	Pole
Dynamic light profile	Customer-specific
Motion detector	In preparation
Hybrid power supply (AC back-up)	Optionally

BATTERY

Technology	VRLA, cycle type	
Location	earth pit	inside pole (for 6 m & 8 m pole heights)
Capacity	55 Ah / 12 V	5 x 13 Ah / 12 V
Dimensions (mm)	L229 x W138 x H210	5 pcs: L755 x W98 x H95
Weight	18 kg	21 kg

SYSTEM

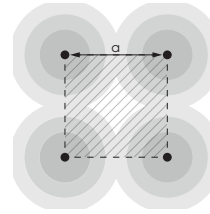
System Power Ratio (SPR)	10	
Autonomy	earth pit	inside pole (for 6 m & 8 m pole heights)
	3 nights (33 h)	3 nights (39 h)
Total weight	89 / 103 / 131 kg (excl. battery)	

LENS TYPE OVERVIEW

Lens	Symmetry	Light distribution	Typical application	FWHM
L45	Asymmetric	Long	ME3-ME6, S1-S6	145° x 60°

ILLUMINANCE TABLE (L45 - STANDARD)

Illuminance depends on local site conditions and customer-specific lighting times.



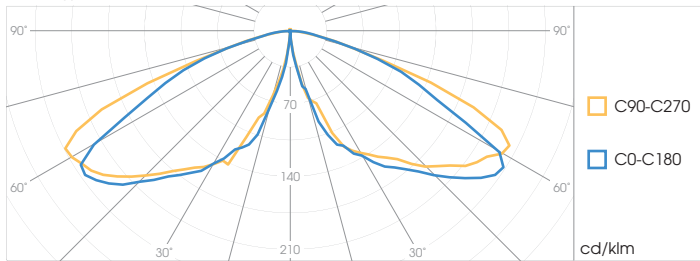
distance (a)	area (A)	E _{av}	E _{min}
10 m	100 m ²	11.0 lx	3.9 lx
15 m	225 m ²	7.6 lx	0.2 lx
20 m	400 m ²	5.2 lx	0.1 lx
25 m	625 m ²	3.6 lx	0.1 lx

E_{av} = average illuminance (lx),
E_{min} = minimum illuminance (lx)

LENS L45 - STANDARD

LIGHT DISTRIBUTION CURVE

η (lens type L45) = 93%



ISOLUX DIAGRAM

lengthwise aligned - light spot height: 4.92 m, boom angle: 0°

