



The future of lighting.
Today.



hei SOLAR LIGHT POLE

hei antares 4000 P100-160

DATA SHEET

A self-sufficient, maintenance-free solar light pole for professional outdoor lighting applications such as pathways, car parks and secondary roads.

Light source	6 high-efficiency LEDs
Solar Operating Power (SOP)	20 Watt
Max. luminous flux @ SOP	3,200 lm
Luminaire efficacy	158 lm/W
Nominal power of solar cells	134 W _p
System Power Ratio (SPR)	5
Autonomy	up to 3 nights (36h)
Pole height	4.0 / 5.0 / 6.0 m
Light spot height	4.1 / 5.1 / 6.1 m

STANDARDS AND COMPLIANCES

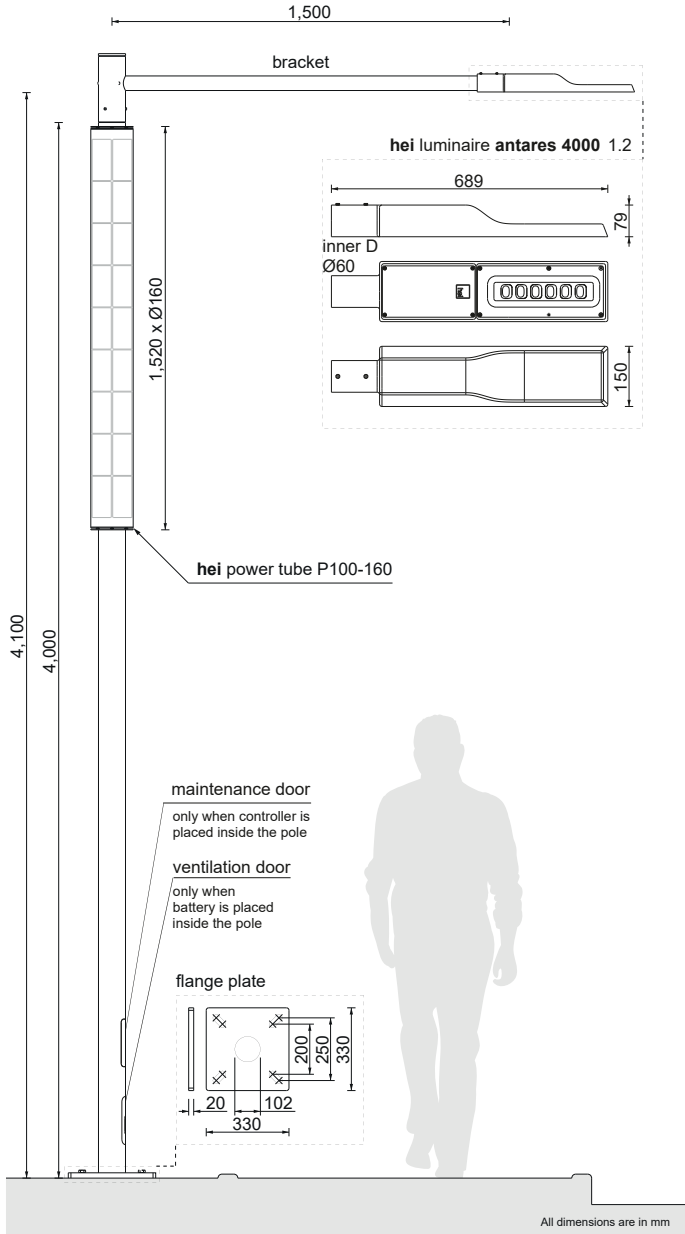
ISO	ISO 9001-2015
Illumination	According to EN 13201, IESNA RP-8-00
Light pole	EN 40
IP Rating (Luminaire)	IP66
Power tube impact protection rating	IK06
Photovoltaics	EN 61215 (adapted)
Temperature range	-40 °C to +50 °C (battery in earth pit)
CE	✓
RoHS	✓

GLOBAL WARMING MITIGATION - ENERGY AND CO₂ SAVINGS

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

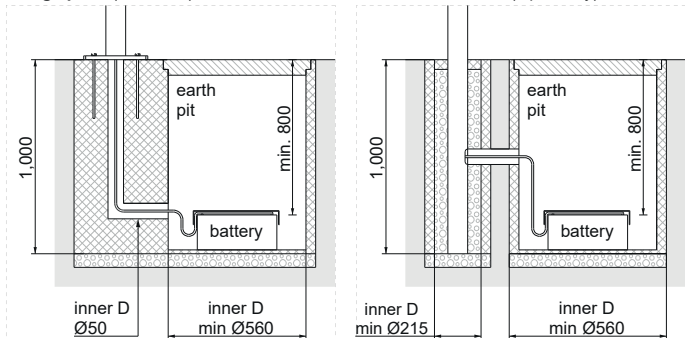
Standard cabled LED	3,700 kWh / 1.9 tons CO ₂
HPS light (102W)	13,300 kWh / 6.7 tons CO ₂

Specific CO₂ emissions: 0.5 kg CO₂ per kWh



Flange plate (Standard)

Sleeve foundation (Optionally)



LUMINAIRE

Solar Operating Power (SOP)	20 Watt
Max. luminous flux @ SOP	3,200 lm
Luminaire efficacy	158 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 ≥ 80 - optionally
Life time of LEDs (L70/B10)	> 90,000 hours
Material (housing)	Aluminium
Finishing (housing)	Powder-coated RAL 9006 (white aluminium) other RAL colours - optionally
Weight	3 kg

POLE, BRACKET

Wind class acc. EN 40	45 m/s
Pole height	4.0 / 5.0 / 6.0 m
Light spot height	4.1 / 5.1 / 6.1 m
Pole diameter	102 mm
Pole weight	73 / 83 / 93 kg
Boom angle	0°
Bracket length	1,500 mm other lengths - optionally
Bracket weight	8 kg
Foundation	Flange plate Sleeve foundation - optionally
Material	Steel
Finishing	Hot-dip galvanized Paint or powder-coating in RAL colours - optionally
Corrosion class	C4
Other pole heights, bracket lengths and boom angles optionally.	

POWER TUBE P100-160

No. Of Power Tubes	1
Technology	Silicon solar cells
Number of solar cells (array)	27 pcs (3 strings x 9 pcs / string)
Nominal power of solar cells	134 W_p
Dimensions (mm)	L1,520 x Ø160 mm
Weight	7 kg

CONTROL ELECTRONICS

Programmable microcontroller	✓
Controller location	Luminaire Pole - optionally (160 mm pole diameter)
Dynamic light profile	Customer-specific
Motion detector	Optionally
Hybrid power supply (AC back-up)	Optionally

BATTERY

Technology	VRLA, cycle type	
Location	earth pit	inside pole (160 mm pole diameter)
Capacity	56 Ah / 12 V	5 x 13 Ah / 12 V
Dimensions (mm)	L229 x W138 x H210	5 x L151 x W98 x H95
Weight	18 kg	21 kg

SYSTEM

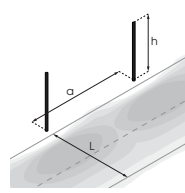
System Power Ratio (SPR)	5	
Location	earth pit	inside pole (160 mm pole diameter)
Autonomy	3 nights (33h)	3 nights (36 h)
Total weight	95 / 105 / 115 kg (excl. battery)	

PHOTOMETRIC DATA

LIGHT DISTRIBUTION OVERVIEW

Light distribution	Lens	Typical application	FWHM
Long (standard)	C70	ME3-ME6, S1-S6	145° x 60°
Wide	C80	ME1-ME4, S1-S2	155° x 80°
Extra Long	C83	ME3-ME6, S1-S6	155° x 50°

STREET LIGHTING (LONG C70 - STANDARD)



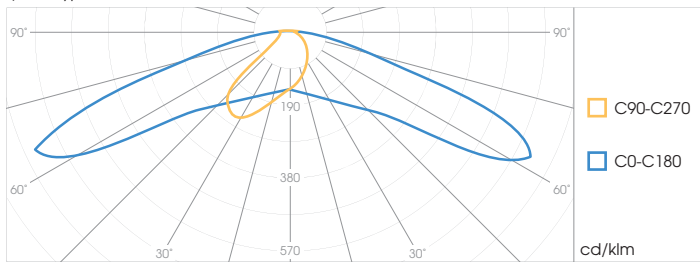
Max. road width (L)	Max. pole distance (a)	Pole height (h)
3.5 m	20 m	4 m
4 m	27 m	5 m
5 m	32 m	6 m

Luminance 0.4 cd/m², uniformity ≥ 0.4, maintenance factor 0.8, Ta = 25°C

LONG C70 - STANDARD

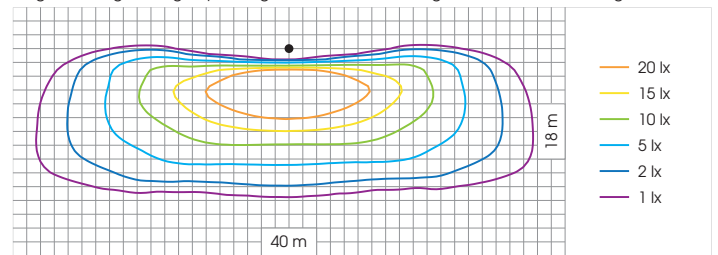
LIGHT DISTRIBUTION CURVE

η (lens type C70) = 93%



ISOLUX DIAGRAM

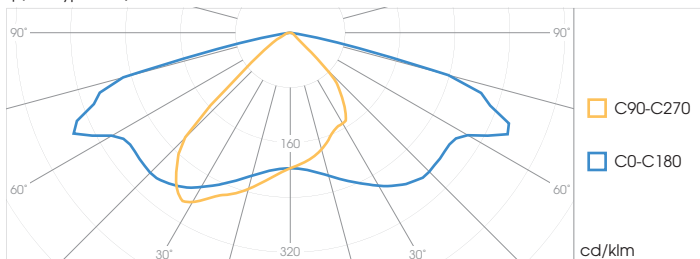
lengthwise aligned - light spot height: 4.10 m, bracket length: 1,500 mm, boom angle: 0°



WIDE C80 - OPTIONALLY

LIGHT DISTRIBUTION CURVE

η (lens type C80) = 93%



EXTRA LONG C83 - OPTIONALLY

LIGHT DISTRIBUTION CURVE

η (lens type C83) = 93%

