



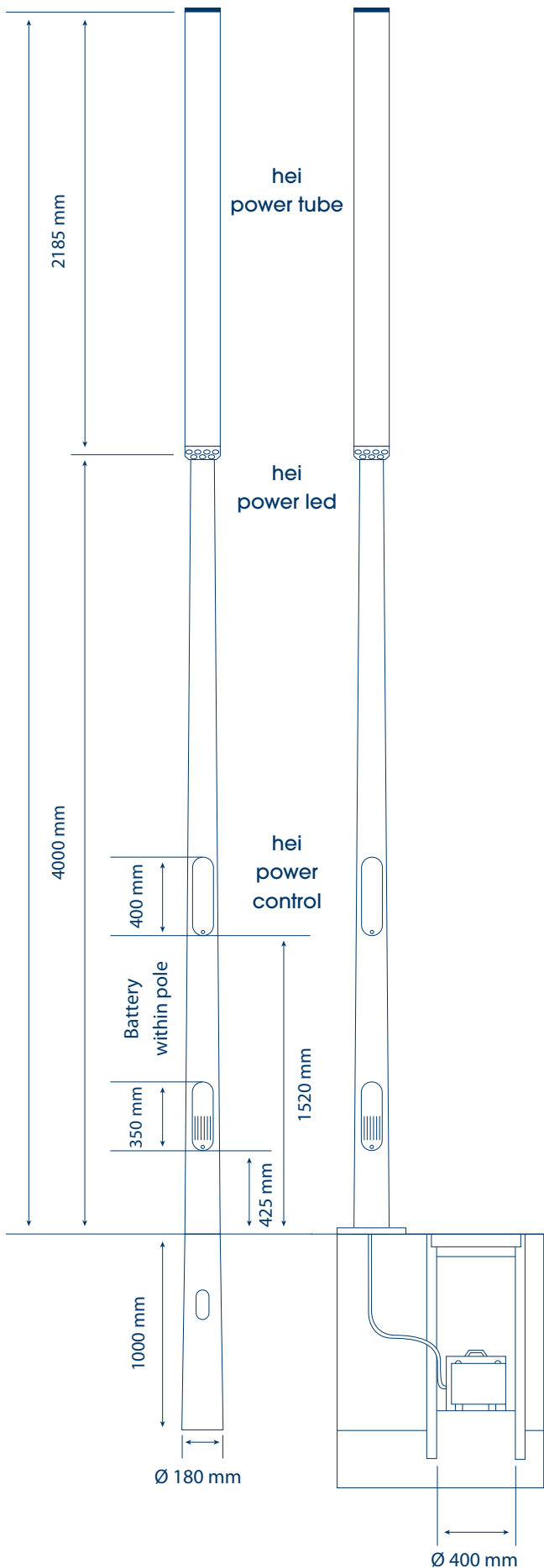
solar light



technical
data

series 30
champ NG
190-2400

dimensions



product specification

champ NG is a stand-alone solar light conceived for outdoor residential and municipal lighting. Equipped with advanced LED and photo-voltaic technology, the champ NG provides a uniform light distribution ideal for squares and promenades. Due to its unique power management electronics, the champ NG ensures high performance and reliability in all weather conditions and in the most challenging solar radiance environments.

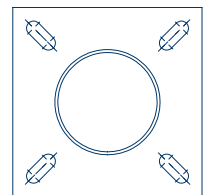
champ NG is available with 24 high-efficiency LEDs and the following additional options:

- Motion detector for customer-specific light distribution
- Part-solar, hybrid version for locations with poor lighting conditions
- Remote maintenance and remote control (from 2011)

light pole versions

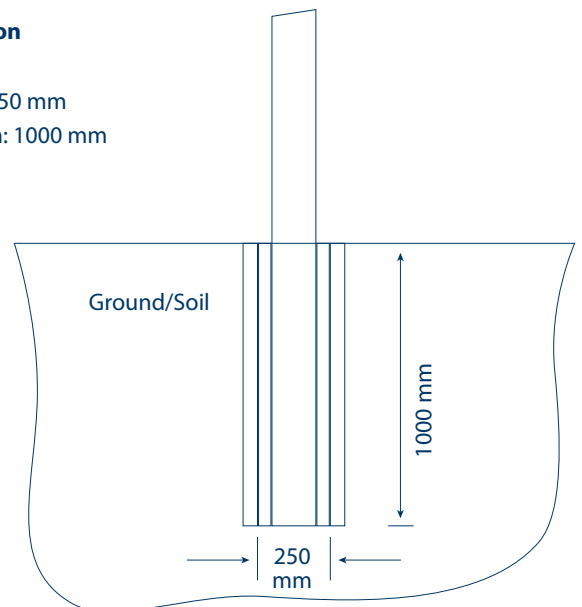
Square ground plate

according to EN 40-5
dimensions: 330 x 330 x 25 mm
hole spacing: 200 to 250 mm



Sleeve foundation

concrete pipe
inner diameter: 250 mm
installation depth: 1000 mm

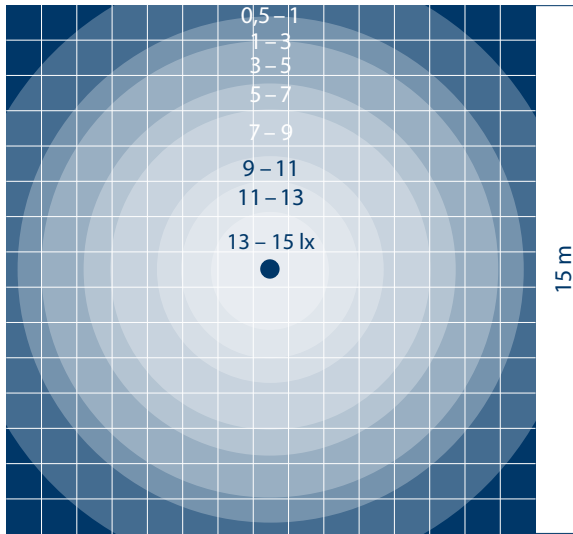


Battery enclosure

In very hot or cold regions, we recommend to position the battery in an underground enclosure rather than in the light pole.

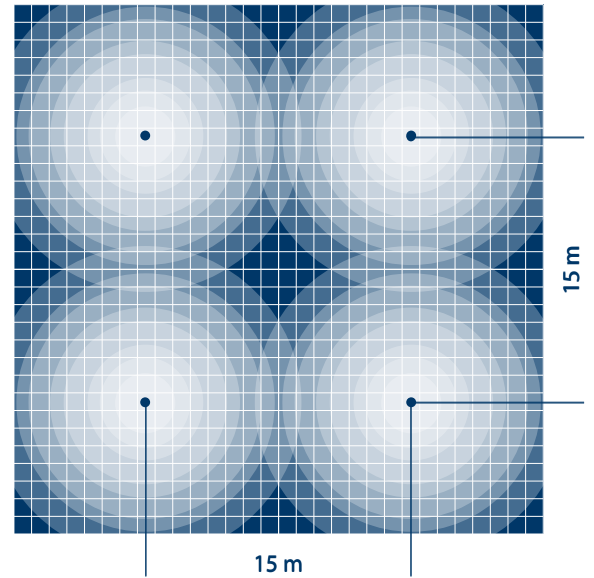
light distribution

Circular light distribution Light spot height: 4 m



installation example

Distance between lights: 15 m Average illumination: 7,9 lx



illuminance

at full operation

distance [m]	area [sqm]	E_{av} [lx]	E_{min} [lx]
10	80	15	5.3
12	120	11	3.9
15	180	7.9	2.5
17	230	6.2	2.1
20	320	4.6	1.2
22	380	3.9	0.8
25	490	3	0.5

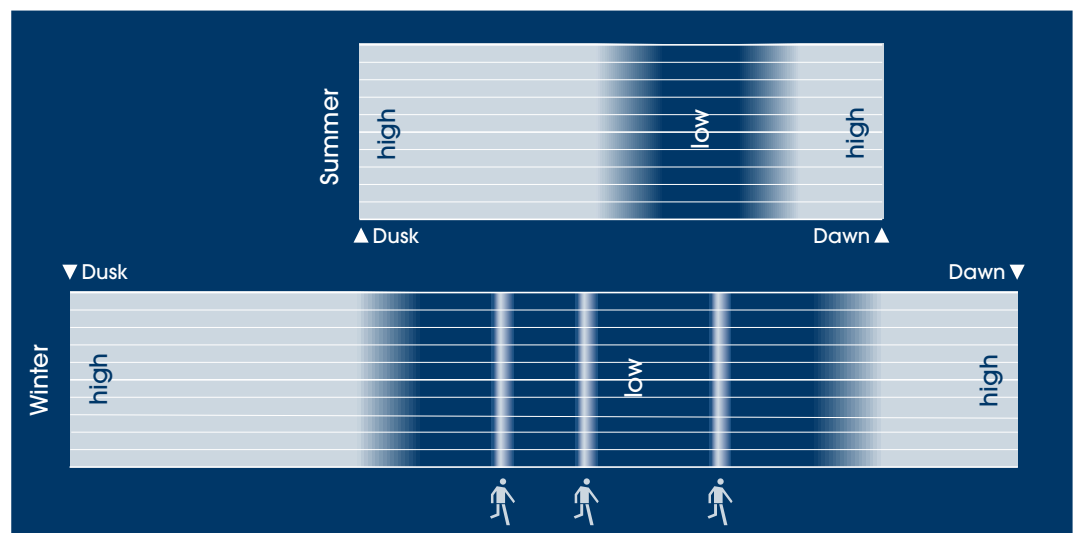
E_{av} [lx]: average illuminance

E_{min} [lx]: minimum illuminance

Illuminance in operation depending on local site conditions (average daylight available) and customer-specific lighting times.

illumination management

Lighting times can be individually adjusted with program switch.



technical data

Model / Type champ NG 190

System	
Installation height	6.25 m
Light spot height	4.0 m
Diameter of light pole	180 mm (base point)
Light pole	steel, hot-dip galvanized, paint-coated, (stainless steel, aluminium optional)
Light pole color	RAL 9006, white aluminium (standard)
Installation	sleeve foundation (ground plate optional)
Weight	125 kg

hei power led	
Illuminant	24 integrated high-efficiency LEDs
Light distribution	circular
max. power	24 Watt
max. luminous flux	2,400 Lumen
Light output ratio	82 %
LED-light temperature	cool-white, 5,300 Kelvin, CRI > 70 (standard) neutral-white, 4,100 Kelvin (optional) warm-white, 3,100 Kelvin (optional)
Standard service life (part load)	> 75,000 hrs
Standard illuminance	up to 15 lx
Illumination area	typ. 100 – 250 sqm

hei power tube	
Height PV-module	2.16 m
Diameter PV-module	180 mm
PV-Technology	silicon-solar cells
Number of PV-cells	64 pcs
Nominal power output	192 Wp

hei power control	
Programmable microcontroller	✓
Dynamic light profile	customer-specific
Motion detector	optional
Capacity of battery	12 V/72 Ah (pole-mounted, standard) 12 V/75 Ah (underground enclosure, optional)*
Technology of battery	lead-acid

Standards / Compliances	
Illumination	according to EN 13201
Degree of protection PV-module	IK06
Certification light pole	EN 40-5, EN 40-3-1, ISO 1461
Certification electronics	IP65
EMV	EN 55015, EN 61547
PV-standard	EN 61215 (adapted)
Temperature range	- 15° C to +50° C (pole-mounted) - 30° C to + 60° C (underground enclosure)*
CE-certification	✓

* Recommended installation for harsh climates in order to increase battery lifespan.

Your HEI Solar Light partner: (company stamp)

