

hei

solar light

EN



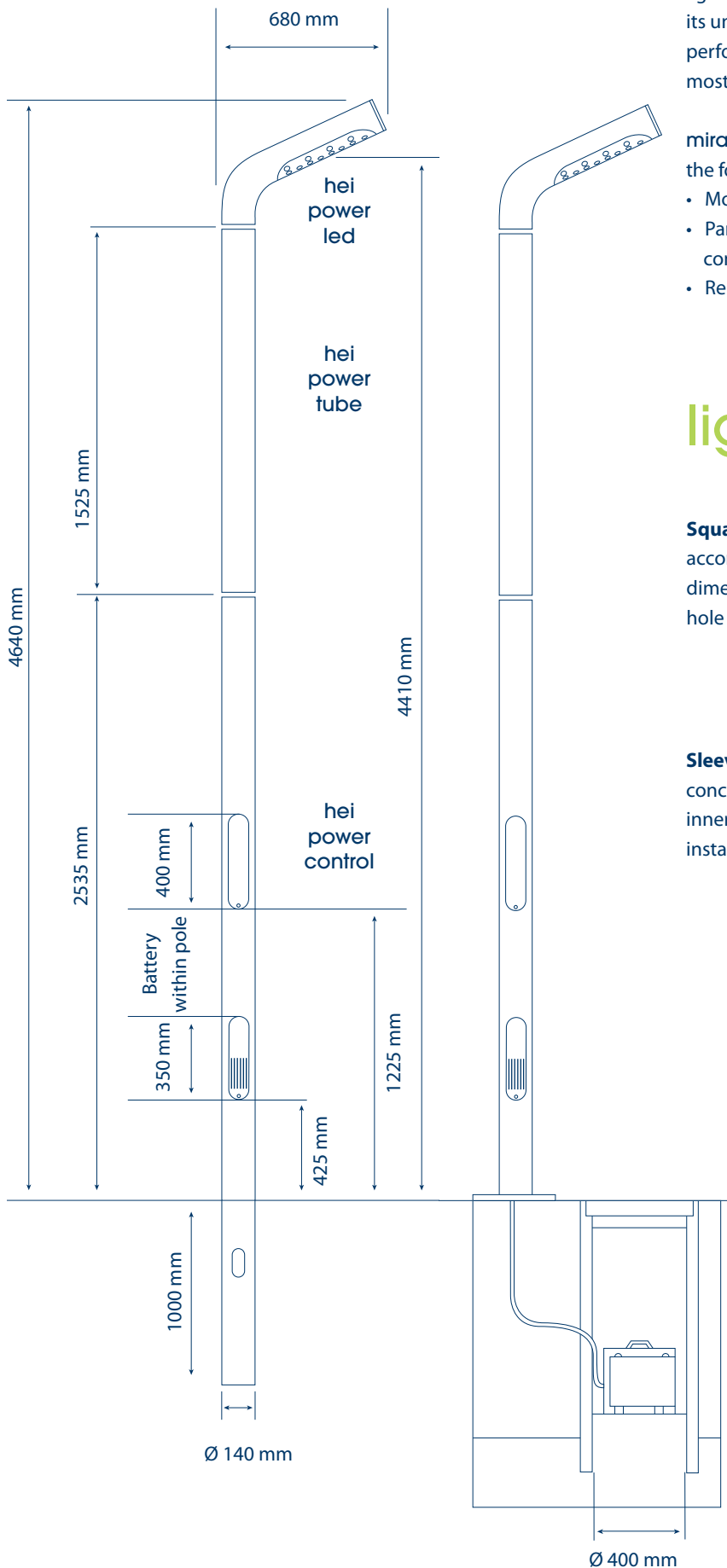
technical
data

series 50
mira s

100 -1200

100 -1800

dimensions



product specification

mira s 100 is a stand-alone solar light conceived for outdoor residential and municipal lighting. Equipped with advanced LED and photo-voltaic technology, the mira s 100 provides uniform light distribution ideal for bicycle paths and pavements. Due to its unique energy management system, mira s 100 ensures high performance and reliability in all weather conditions and in the most challenging solar radiance environments.

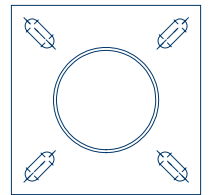
mira s 100 is available with 12 or 18 high-efficiency LEDs and the following additional options:

- 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

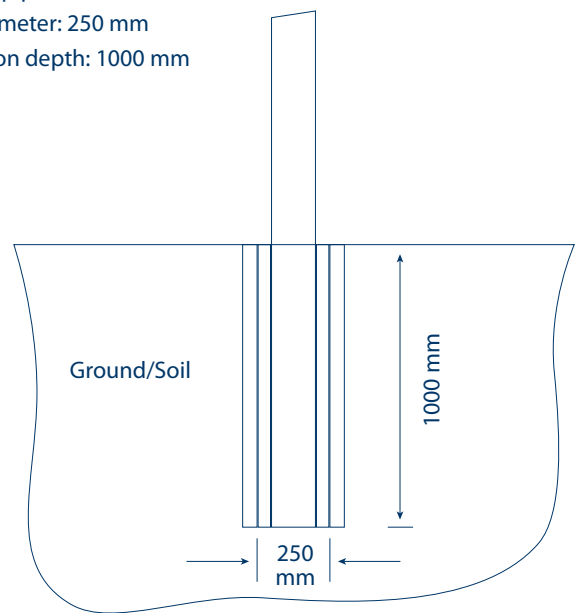
Square ground plate

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

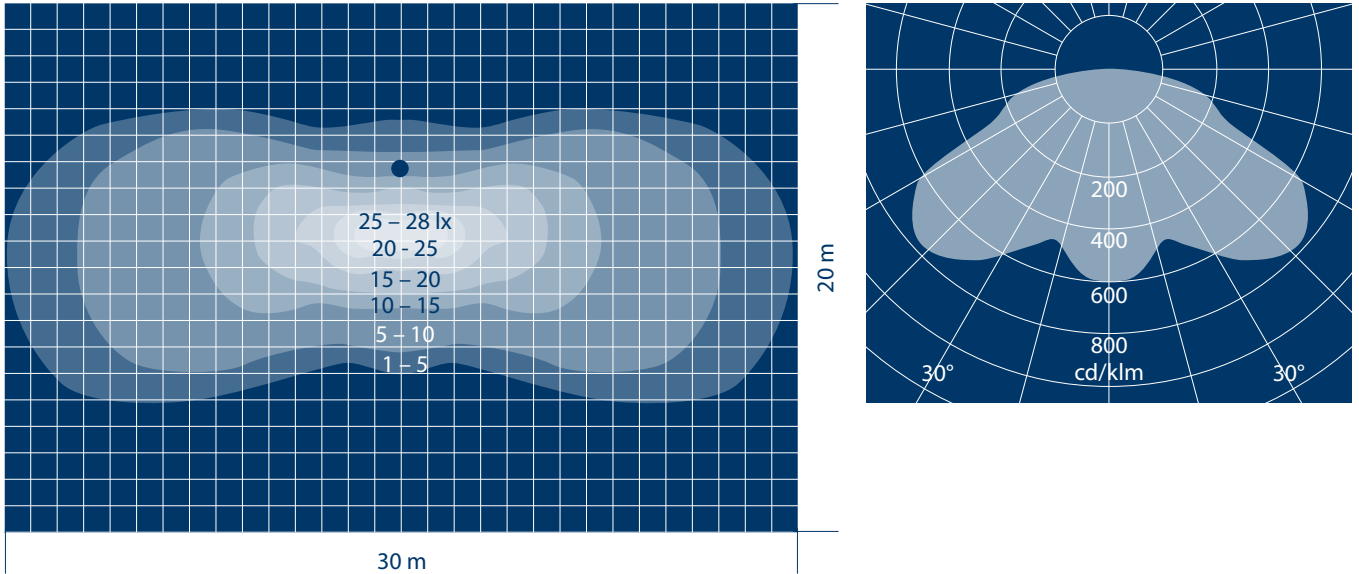


Battery enclosure

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

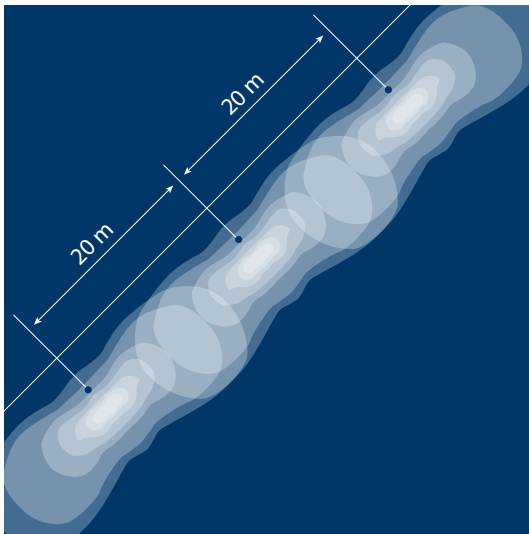
light distribution

Light distribution: lengthwise aligned Light spot height: 4.40 m 18 LEDs / 1,800 lm



installation example

Distance between lights: 20 m Average illuminance: 9.8 lx



illuminance

at full operation path-width: 5 m 18 LEDs / 1,800 lm

| distance [m] | area [sqm] | E_{av} [lx] | E_{min} [lx] |
|--------------|------------|---------------|----------------|
| 10 | 40 | 20 | 12 |
| 15 | 60 | 13 | 7.2 |
| 20 | 80 | 9.8 | 3.3 |
| 25 | 100 | 8.2 | 1.6 |
| 30 | 120 | 6.7 | 0.9 |
| 40 | 160 | 5 | 0.3 |
| 50 | 200 | 4 | 0.1 |

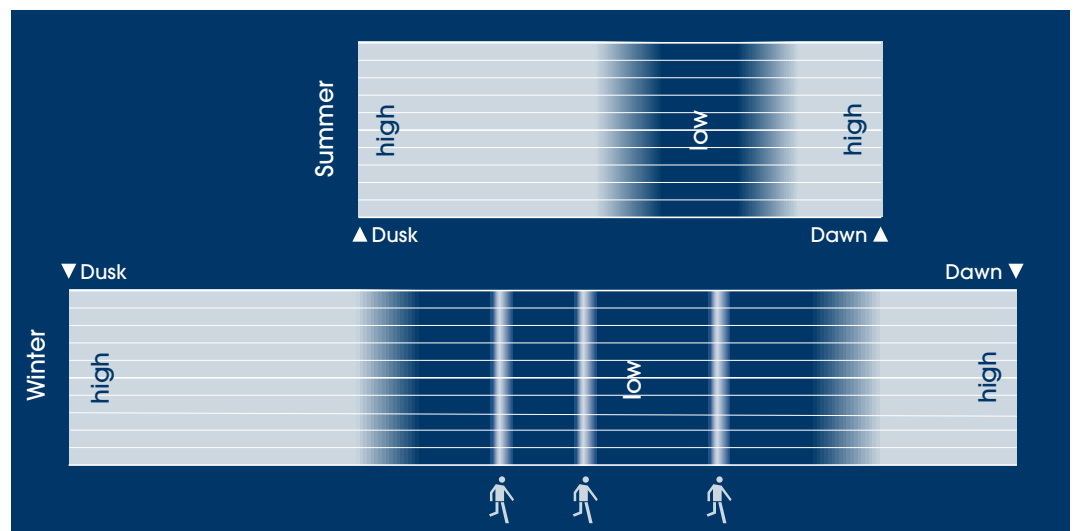
E_{av} [lx]: average illuminance

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-selection-switch.



technical data

| Model / Type | mira s 100 | |
|--------------|------------|--|
|--------------|------------|--|

| System | |
|------------------------|---|
| Installation height | 4.65 m |
| Light spot height | 4.40 m |
| Diameter of light pole | 140 mm |
| Light pole | steel, hot-dip galvanized, paint-coated, (stainless steel, aluminium optional) |
| Light pole color | RAL 9006, white aluminium (standard) |
| Light head color | RAL 9005, deep black (standard) |
| Installation | sleeve foundation (ground plate optional) |
| Weight | 120 kg |

| hei power led | | |
|-------------------------------|--|----------------------------|
| Type | mira S 100-1200 | mira S 100-1800 |
| Illuminant | 12 high-efficiency LEDs | 18 high-efficiency LEDs |
| max. power | 12 Watt | 18 Watt |
| max. luminous flux | 1,200 Lumen | 1,800 Lumen |
| typ. illuminance | up to 9 lx | up to 13 lx |
| Light distribution | lengthwise aligned | |
| Energy conversion efficiency | 82 % | |
| LED-light temperature | cool-white, 5,300 Kelvin, CRI > 70 (standard) neutral-white, 4,100 Kelvin (optional) warm-white, 3,100 Kelvin (optional) | |
| typ. service life (part load) | > 75,000 hrs | |
| Illumination area | typ. 60 – 150 sqm | |

| hei power tube | |
|----------------------|---------------------|
| Height PV-module | 1.5 m |
| Diameter PV-module | 140 mm |
| PV-Technology | silicon-solar cells |
| Number of PV-cells | 33 pcs |
| Nominal power output | 100 Wp |

| hei power control | |
|------------------------------|--|
| Programmable microcontroller | ✓ |
| Dynamic light profile | customer-specific |
| Motion detector | optional |
| Capacity of battery | 12 V/32 Ah (pole-mounted, standard) 12 V/30 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)

