

Range Mira & Champ

Mira 4000  
P200-160



Meyrin - Genève



The **Mira 190™** is a stand-alone off-grid solar lighting system conceived for public professional and private outdoor lighting.

The **Mira 190™** is equipped with an LED light head powered by the photovoltaic module **hei power tube™** with an output of 210Wc. This model offers 24 or 36 LEDs delivering a luminous efficiency between 118 and 120 lm / w on the ground.

The **Mira 190™** provides a direct beam, specially designed for illuminating roads, public squares, and medium sized open spaces, etc.

Thanks to its intelligent energy management system (microprocessor), the **Mira 190™** guarantees uninterrupted operation even in bad weather conditions, low ambient light and weak sunlight

Two models are available:

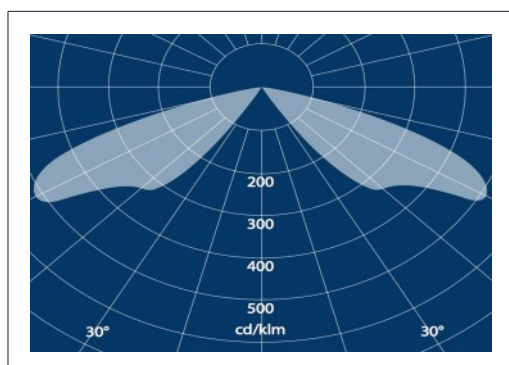
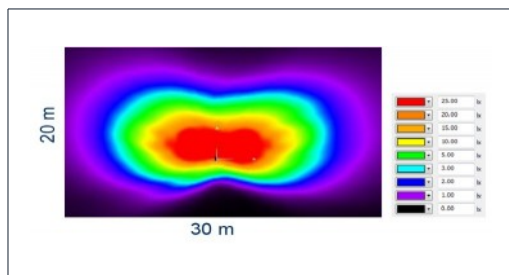
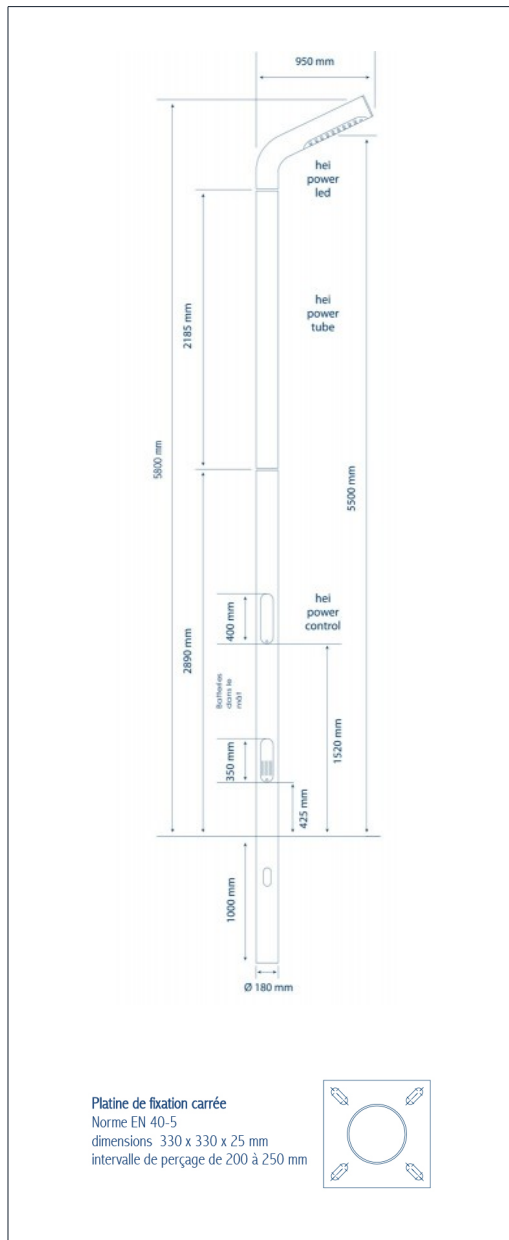
- The **Mira 190-2400**: This has a light head with 24 LEDs
- The **Mira 190-3600**: This has a light head with 36 LEDs

Options:

- Motion sensor for customised programming
- Hybrid system combining solar and on-grid
- LED colour temperature options of 4,100k and 3,100k
- Colour recoating of the mast with RAL at buyer's option (additional cost with rate depending on the colour chosen)

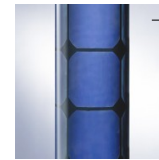
Our partners

# Technical data



— hei power LED™ (Mira & Champ)

- 139 lumen/Watt at 5'300k (illumination source)
- Up to 5'000 lumen possible (illumination source)
- 1 LED chip per optical
- LED replacement possible through its screw attach system
- Optimized illumination



— hei power tube™

- Patented photovoltaic technology
- Poly-directional energy yield (360°)
- Accumulates energy by absorbing solar and ambient light
- Monocrystalline silicon cells (Mira & Champ)
- Multi-crystalline silicon celles (Antares)
- Withstands high wind loads
- No deposits on surface
- Reduced risk of vandalism



— hei power control™

- Autonomous, individually programmable
- Smart system of monitoring (8-10 nights autonomy)
- Automatic battery management
- MPP Tracking for maximized energy yield
- Brightness control by PWM (Pulse with modulation)



— Economic & Ecologic advantages

- Reduced setup costs
- Low maintenance costs
- No electricity consumption
- Zero energy costs in operation
- Zero CO2 emission

OPTICAL FEATURES	Mira 190-2400	Mira 190-3600
Light source	24 high efficiency LEDs	36 high efficiency LEDs
Maximum power*	24 Watt (*at source)	36 Watt (*at source)
Maximum luminous flux*	3'340 lm (*at source)	5'000 lm (*at source)
LED-light temperature	5'300K Cool white, CRI > 70 (standard), optional 4'100K and 3'100K	
LEDs life expectancy	> 50'000 hours	
LIGHT SYSTEM		
Height installation / light spot	5'800 mm / 5'500 mm	
Light pole diameter / materiel	180 mm / Steel, hot-dip galvanied	
Light head color	RAL 9005 Dark black (standard)	
Light pole color	Paint-coated RAL 9006 white aluminium (standard)	
Weight	ca. 185 kg	
Installation mode	Flange plate (opt. sleeve foundation)	
STREET LIGHTING		
Optimum pole distance	20 m	25 m
Typical street width	7 m	
Typical illuminance	19 lx	26 lx
HEI POWER TUBE		
PV module length / diameter	2'185 mm / 180 mm	
PV Cells material / number	Monocrystallines cells / 64	
Energy efficiency	200 Wp	
HEI POWER CONTROL		
Controller	Yes	
Profil dynamic lighting	Custom and 36 preset lighting profiles	
Capacity of the battery	72 Ah / 12 V - VRLA cycle type	
Weight / Dimensions of the battery	15 kg / 150x94x95 mm	
STANDARDS / COMPLIANCES		
Illumination / EMV, electronics certificates	EN 13201 / EN 55015, EN 61547	
Certification light pole / PV module	En 40-5, EN 40-3-1, ISO 1461 / EN 61215 (adapted)	
Ingress protection rating	IP65	
Temperature of service	-30°C à +70°C	
CE-Certification / RoHS / ISO Standards	Yes / Yes / ISO-9001-2008	