

Case Study - Masdar City

Solar Powered Parking & Roadway Lighting



Project	Masdar City Security Zone Area
Location	Abu Dhabi, United Arab Emirates
Sales Rep	Hawk Energy Limited
Product	Mira 380-7200 (7200 lumen/72 LEDs)
Status	Finished
Completion	December 2010
Description	Installation of 101 pieces Mira 380-7200 high decorative and efficient solar lights with integrated mono crystalline silicon solar cells complete with all appertenances, including (but not limited to) LED luminaire, LEAD-ACID batteries, electronic system, wiring base plates, anchor bolts and foundation.

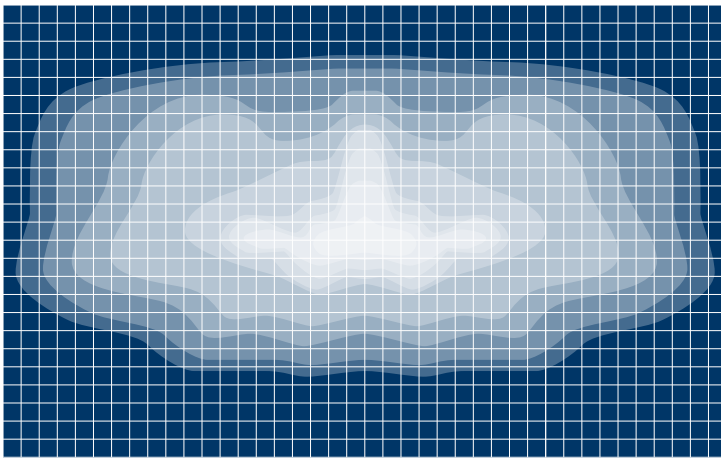
Solar Powered Parking & Roadway Lighting - Masdar City, UAE

HEI Solar Light GmbH, working with locally-based Hawk Energy Limited, provided a turn key solution for the outdoor lighting of Masdar City, located in the United Arab Emirates. The contract included engineering, fabrication, delivery to site and transport of 101 pieces of highly efficient innovative solar powered LED lights type Mira 380-7200.

Prior to selecting HEI Solar Light as supplier, Masdar evaluated several solar powered fixtures from various world-class manufacturers. Due to its outstanding technology based on the patented „power tube“ and „power led“ in combination with an extraordinary design, HEI Solar Light was ranked first to deliver and install its Mira 380-7200 model.

About HEI Solar Light™ Mira 380-7200

Mira 380 is an independent and self-sufficient light for professional exterior lighting systems. The solar-powered light provides a remarkable luminous flux of up to 7,200 lumen with 72 LEDs fed by a fully into the light pole integrated photovoltaic-module, setting new standards in terms of design and performance of solar outdoor lighting. The LED-technology was specially developed for hei solar light™, using a light temperature of 5300 Kelvin and lenses, which are particularly designed in the HEI-laboratory. This enables an extraordinary light distribution, reducing effects on any kind of light pollution substantially.



Light distribution: lengthwise aligned

The patent-registered and unique photovoltaic-module-technology, optimized for poor lighting conditions, ensures an optimal energy supply. Selected highly efficient mono-crystalline silicon solar cells and an innovative lamination and manufacturing technology result in an outstanding design and a top performance even on cloudy days and during diffuse daylight (e.g. sandstorms). The cylindrical shape of the PV-module withstands high wind loads and avoids deposits on the surface like sand, snow or dirt.

The active and intelligent energy management system is constantly monitoring Mira 380. The system optimizes the light output as well as the energy efficiency.

The perfect battery management including MPP-tracking for maximized energy yield and brightness control by PWM allows best performance.

A unique minimalist design together with an innovative technology forms Mira 380 into a technical and aesthetic milestone in the development of professional solar lights.

About the Masdar City Initiative

The Abu Dhabi Future Energy Company is a multi-faceted company advancing the development, commercialisation and deployment of renewable energy solutions and clean technologies. The Masdar Initiative is driven by the Abu Dhabi Future Energy Company.

Masdar integrates the full renewable and clean technology lifecycle - from research to commercial deployment - with the aim of creating scalable clean energy solutions.

Masdar works with global partners and institutions to integrate new research with proven technologies to produce efficient systems and processes that can be replicated globally. The city is planned to cover 2.3 sq mi. and will be home to 50,000 people and 1,500 businesses, primarily commercial and manufacturing facilities specializing in environment-friendly products. More than 60,000 workers are expected to commute to the city daily.



For more information on Masdar city please refer to www.masdar.ae.