# inteliLIGHT® provides the smart street lighting management for Dubai Water Canal

inteliLIGHT® provides smart individual street lighting control for 775 streetlights that illuminate Dubai's newest touristic and commercial attraction, the Dubai Water Canal.

#### The **location** and **context**

Located on the southeast coast of the Arabian Gulf, with its over 2.5 million people, Dubai is the most populous city in the United Arab Emirates and the capital of the Emirate of Dubai. An important business and commercial hub of the Middle East, Dubai has recently attracted world attention through many innovative large construction projects, skyscrapers and high-rise buildings becoming an important touristic destination.

Dubai Water Canal is an artificial canal and Dubai's newest touristic and commercial attraction. With shopping center, hotels, restaurants and luxury housing stretching over 3 km, the constructors did not do any compromise on quality. The architectural and pedestrian street lighting was an important concern and for that they sought a street lighting control management system to live up to the requirements.

# The challenge

For a project with high quality standards, the street light management system had to be a proven, reliable solution:

- seamless operation, even under hot climate
- Possibility to embed existing controllers into the Neri LED design lamps
- communications over the existing bridges and difficult access
- compatibility with different lamp manufactures
- state of the art management options and maintenance optimization capabilities
- tight execution term for deployment



# The **argument**

inteliLIGHT® is an extensively tested solution already deployed for tens of thousands of street lights worldwide, including several large scale projects in the Middle East and other areas with hot climate.

Stable real-time, continuous connectivity through existing power cables and additional safety mechanisms provides a high reliability of the system while keeping the costs down.

Additionally, inteliLIGHT® is compatible not only with different lamp manufactures, but also with different lamp types and offers modules specifically designed to be embedded into streetlamps.

Complex management capabilities and optimization tools can cover the most demanding requirements.

#### **Technical** solution

Main inteliLIGHT® streetlight control system

- 5 x Distribution Feeder Pillars: Remote Terminal Unit equipment sets (FPC-200 data concentrator, FNM-232 electric network analyzer, FVD-124 voltage presence monitor and FRB-110 intelligent communications router)
- 23 x Lighting Feeder Pillars: Remote Terminal Unit equipment sets (FPC-200 data concentrator, FNM-232 electric network analyzer, FVD-124 voltage presence monitor and FRB-110 intelligent communications router)
- 775 x inteliLIGHT FPE-220 controllers, of which 242 were embedded into the lighting fixtures by the lamp manufacturer
- inteliLIGHT® streetlight control software



# The deployment

A mixed deployment team formed by Spectrum's Solution Architect, Project manager and FLASHNET specialists installed all the feeder pillar equipment within a tight time frame of seven days. One third of the lamp controllers were directly embedded into the lighting fixtures by the manufacturer at FLASHNET's specifications and the rest were retrofitted with existing lighting fixtures.

#### The results

Continuous communication, safe operation, real time system feedback and control:

- Reduced maintenance costs by 42%,
- Possibility to reduce consumed energy by up to 35%
- Improved lighting quality (including real-time alerts of any malfunctions)
- Improved safety



## About Spectrum Group Dubai

Spectrum Group was incorporated in the year 2004 in Dubai Internet City, since then Spectrum has emerged to be a pioneer in empowering organizations through its knowledge transfer services, professional services, consultancy services and as a value added distributor of IT Network and Security products and solutions by leveraging on its inherent strength in infrastructure, excellent subject matter experts and excellent customer support capabilities.

### About FLASHNET and inteliLIGHT®

Founded in 2005, FLASHNET is a leader in intelligent energy management systems, with worldwide operations. Its hardware and software solutions integrate the latest IT, energy and telecommunications technologies in order to create and implement intelligent systems for smarter cities and better infrastructure. For further information, please visit www.flashnet.ro, www.inteliLIGHT.eu



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