Multi-utility solution for the Beirut Souks

Intelligent action saves water and energy

The Beirut Souks is one of the biggest shopping complexes in the MENA region (Middle East – North Africa). HYDROMETER has developed an integrated Smart Metering solution for measuring and reading water, cold, gas and electricity in the Souks. Natural resources and energy are invaluable here, and the new infrastructure permits complete control of all consumption – and fair allocation of the costs.

Beirut Souks

The aims are optimized system operation, waste avoidance and wise and efficient use of natural resources and energy.

Project Manager Stefan Räder (HYDROMETER GmbH) explains the benefits of the Automatic Meter Reading System M-Bus.

Water resources are extremely scarce in the MENA region and CO_2 emissions are increasing every year. An integrated metering technology must provide detailed information about consumption profiles, network problems, leaks and manipulation, cover different tariffs and tariff settings, and provide a reporting system.

The aims are optimized system operation, avoidance of waste and wise and efficient use of natural resources and energy – also in order to meet the high requirements of LEED (Leadership in Energy and Environmental Design) and green building initiatives.

Demanding prestige property
The Beirut Souks in the heart of the Lebanese capital occupies a constructed area of 120,000 m². The property built in Arab style accommodates more than 500 jewellers, galleries, boutiques, food shops, an IMAX cinema complex and a science museum. The developer and owner of the project is Solidere – a company also known for its reconstruction and development of the Beirut Central District.

Targeted technological approach
HYDROMETER supplies the right solution for every customer. HYDROMETER developed the following concept based on long-term studies and experience with large-scale installations under real conditions in the region:

· HYDRUS ultrasonic meters for water metering
· SHARKY ultrasonic meters for energy metering
· Digital electricity meters in accuracy class 1
· All meters with Real Data M-BUS interface
· IZAR CENTER as system technology. The intelligent M-BUS Master continuously checks the system, validates meter data and transfers these data over all common media (LAN, W-LAN, GPRS)
· IZAR@NET as automatic reading software. The powerful AMR (Automatic Meter Reading) and AMM (Automatic Meter Management) software solution permits full integration of all resources.

This cross-media system solution allows metering and reading of water, thermal energy, gas and electricity consumption over a central infrastructure. This multi-utility approach guarantees the customer economic, long-term and stable operation and intelligent energy data management, which is open for future developments in every respect.