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M2M 100 2008
Telit has been selected by M2M MAGAZINE as one of the top 100 companies in m2m worldwide

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The Telit m2m Magazine

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Telit wireless solutions

Making machines talk.®

Telit APAC – Gateway to Asia Pacific – 아시아태평양의 관문

by SG Kang, President and CEO Telit Wireless Solutions APAC

SG Kang
President and CEO Telit Wireless Solutions APAC

Telit APAC was created in June, 2006 by the acquisition of Bellwave Company's m2m division which has been the leader of m2m business in Korea since 2000 when it first announced a CDMA 1X data modem. Bellwave m2m supported a variety of m2m applications such as PDAs for industrial use, wireless POS terminals, automotive systems, aftermarket telematics solutions, security devices and AMR/AMM modems. Telit APAC now has a full line of CDMA data modem products from CDMA 1X to EVDO as stand alone terminals, external modems for outdoor applications and embedded modems to meet a large variety of customer applications.

The year 2007 has been very meaningful to the m2m market in Korea as a variety of applications have appeared in the social and public sector. The Telit CDMA module has been integrated into an industrial PDA for postmen of the Korea Post and into a cash card for the persons who receive government aid provided by the Ministry of Health and Welfare.

In addition, Telit's automotive module has been offered to major Korean car makers including Hyundai, Kia, and Ssangyong and Seoul brand taxies for a call service called "Navy Call." After developing the UC864, HSDPA module, Telit provided the monitoring device for the 3G repeater of KTF, one of the major communications operators.

Within Korea, Telit has secured business channels in AMR and telematics sectors. This has resulted in brisk business cooperation and achievements. Telit offered new functionality for a GC/CC/UC line up for major existing PDA manufacturers. The manufacturers who adopted the Telit GSM module are developing new products with the module.

Gateway to Asia Pacific m2m Industry

The mission of Telit APAC is to continue the development of CDMA and WCDMA products for the global market. In addition to this, Telit APAC is strongly pursuing to establish its marketing, sales and technical support function for the Asia Pacific markets including China, Japan and Southeast Asia.

Telit APAC is based in Seoul, Korea and is expanding its sales, marketing and technical functions in the region. As a result, Telit APAC established offices in ShenZhen and Shanghai, China and Taiwan in 2007. In addition to its launch in China, Telit APAC has been actively moving forward to expand the coverage of Asia Pacific sales networks including major distributors such as Arrow and Honstar. Telit APAC has completed its first phase establishment of distribution channels with Arrow for all of Asia, Honestar for China, and Soanar for Southeast Asia, and secured a bridgehead for the China AMR market by developing two design-in accounts with two of the top five AMR players. Telit APAC has also explored a number of opportunities for HSDPA products and made the first shipment for one design-win project while the number of design-in accounts is increasing. Telit APAC also managed to develop three design-in accounts from India with its embedded GPS solutions for vehicle tracking and several of them are close to placing the initial order for their pre-production.

Telit completed the development of the UC864 family for all EU and Korean markets to build a unified platform across GSM/GPRS, CDMA and WCDMA. Customers can easily migrate from one radio interface to another thus adapting to different markets and networks. A customer solution running on a GSM/GPRS network can easily be upgraded to run on a CDMA and WCDMA network with minimal effort required to modify its existing products and vice-versa. Customers can expand their business easily and quickly to new markets.

Highlights

Telit APAC participated in PT/EXPO COMM in Beijing, China on October 23rd – 27th, 2007. The exhibition was a great success drawing market attention to both the Telit Group and the m2m industry in China. Many potential customers visited Telit's booth and were interested in Telit APAC's products and Telit Wireless Solutions Co Ltd.

TELIT GREEN

GET A RING FROM OYSTERS

by Dr. Jean-Charles Massabuau, PhD, Research Director CNRS, Physiological Ecology & Ecotoxicology, Aquatic systems, University Bordeaux 1 & CNRS

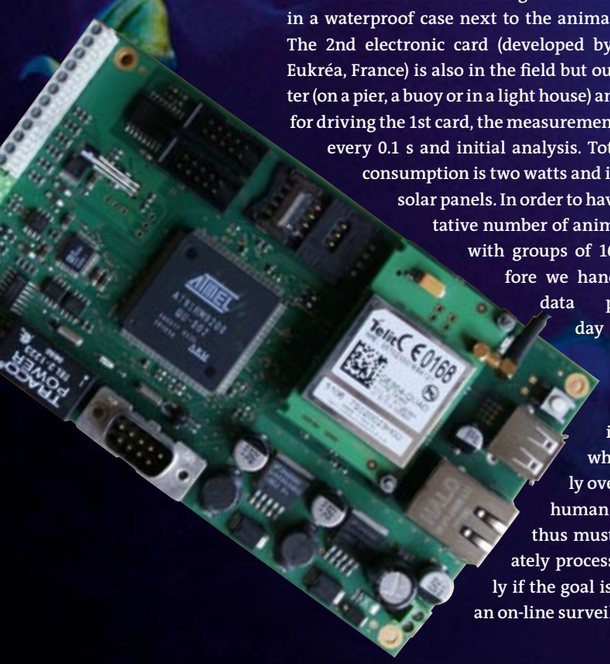
Now more than ever, protection of the environment is a top priority. This is particularly true for aquatic environments and especially so for coastal waters. A current estimate is that 40% of the world's population lives within 60 km of a coastline, and it is thought that this will increase to more than 80% by 2050. Today, 80% of water pollution comes from activities on the land and it is clear how susceptible our coastal waters are to this pollution. Surveillance and protection of our shores is fundamental. We must, in real time, be able to inform people of water conditions. The ability of oysters or other mollusk bivalves to 'taste' their environment is one of the possible ways to monitor the quality of our coastal waters. Monitoring their natural opening/closing activity is yet another way to put a 'thermometer' in our waters and read, throughout the year, the health of both the bivalves and their environment.

The first available information on bivalve behavior dates from around 1900. At that time, animal activity could be measured for a few hours using pieces of string or wood attached both to an animal placed on a table and a rotating cylinder covered with smoked glazed paper.

www.domino.u-bordeaux.fr/molluscan_eye

With the extraordinary technological advances in Internet and mobile telephone networks in recent years, we can now sit at our desks and continuously survey and record the behavior of animals on the other end of the Earth. A multidisciplinary team of biologists, electronics specialists and mathematicians from the Marine Station of Arcachon (France) developed this system. It was initially for use in basic research aimed at better understanding aquatic animals and their environment, but it is now also applied as an aid in the on-line monitoring of water quality.

The system is, at the same time, both terribly simple and terribly complicated. We glue light electrodes to the two shells of freely behaving bivalves so that we can measure the amount of shell opening and closing. The electrodes weigh less than one gram each and have been designed to minimize animal disturbance. The 1st electronic card manages the electrodes and is in a waterproof case next to the animals in the sea. The 2nd electronic card (developed by the Société Eukréa, France) is also in the field but outside the water (on a pier, a buoy or in a light house) and uses Linux for driving the 1st card, the measurements that arrive every 0.1 s and initial analysis. Total electronic consumption is two watts and is supplied by solar panels. In order to have a representative number of animals, we work with groups of 16, and therefore we handle 1,720,000 data points per day ... every day. This is a tremendous amount of information which can easily overburden any human mind and thus must be immediately processed, especially if the goal is to maintain an on-line surveillance!



The first problem, therefore, was to transfer and handle the data fast enough. Here, we have taken advantage of the worldwide explosion of cellular telephone networks. Today anywhere there is a cellular network, we can connect it to oysters or other bivalves, and they can "give us a ring" every day using a Telit module embedded on the 2nd electronic card. We are now transferring files as large as 1.5 MB. In France, the Orange Company told us that in early 2007 we completed the largest file transfer using their GSM network.

From the laboratory we can also directly manage the local electronics: we can update the programs we have developed or change the time of data transfer. When the raw data arrives in the laboratory, they are modeled and analyzed in about 30 minutes. The idea is to produce a single mathematical equation for each animal for each day, then to exploit these equations so that the maximum possible amount of 'digested' data can be obtained and statistically analyzed for daily, weekly, monthly and/or yearly patterns. The data can then be shown graphically for easy reading. Analyses are performed on a DELL precision 690 workstation running with two dual-core Xeon processors and using both Bash Linux and mathematical codes written in R (http://CRAN.R-project.org/doc/FAQ/R-FAQ.html).

To model the variety of bivalve behaviors we have developed a non-parametric and robust regression analysis based on kernel estimators. To use these models it has also been necessary to develop algorithms that minimize the time required for calculations of the whole data set (24 MB/day). Thus, less than one hour after data arrives in the lab, a 1st output is available, in an analyzed form, on the web. We have created a site which is available both in English and in French, 'The Molluscan Eye' (l'Œil du Mollusque: http://www.domino.u-bordeaux.fr/molluscan_eye), where the public can find recordings of the detailed behavior of oysters and other bivalves ... from just yesterday. We also have private access for professionals.

Our first monitoring site is right outside our door, in front of the Marine Biological Station of Arcachon in France. It has been running since March 2006. Here we use oysters to try and detect any arrival of toxic algae. This can be extremely helpful to the local oyster farmers. Our second monitoring site is on the other side of the world. We are monitoring 16 giant clams on an isolated reef in a lagoon south of the island of New Caledonia. The overall idea is to participate in the creation of an Environmental Observatory whose goal is to contribute to the maintenance of as clean an environment as possible. Coming soon will be a Marine Station in Svalbard, just 1500 km from the North Pole, where we would like to monitor changes associated with global warming: a very large problem. Then, using a basic idea that sprang from pieces of string, we are going around the world thanks to the m2m market which can today help to maintain our planet integrity.

Team members:
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Gilles Durrien
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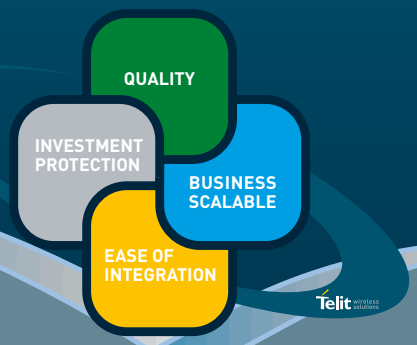
IRD – E. Folcher

Who is your m2m module vendor?

A trendy cell phone maker?
A power generation equipment manufacturer?

Our core business is m2m.

We leverage from this focus to bring you innovative products
and comprehensive support now
and for a long time to come.



We live m2m

Telit wireless solutions

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