

# **EIRIS™** Patient Locating System



Combining **EIRIS™** LPS with Siemens Infinity™ Telemetry System provides St. Clara hospital staff with a rapid response tool

## Medical Centre Rijnmond Zuid, The Netherlands

"Intended to be a tool for emergency and acute situations, this system proved to be a useful and efficient tool even in the ordinary everyday situation where you need to provide any kind of service to a patient."

Ms. M. J. Breedveld, Manager of Cardiologic Department

<b>Start Date</b>	June 2000
<b>Customer</b>	Medical Centre Rijnmond Zuid St. Clara, Rotterdam, The Netherlands
<b>Partner</b>	Siemens Medical
<b>Solution</b>	Siemens' Infinity™ Telemetry Patient Monitoring, powered by EIRIS™ Local Positioning System
<b>System</b>	Windows NT 4.0 Microsoft SQL 7.0 ELPAS EIRIS™ 3.0-PRO Echelon LonWorks Network

## The Challenge

The St. Clara Hospital, based in Rotterdam, The Netherlands, places in high regard the matter of locating unsafely-wandering patients. Until now telemetry patients - who, for faster recovery, are encouraged to move around and not stay in bed - were limited to a small defined area of the Coronary Care Unit where they could be easily observed.

Management wanted an effective system that would locate patients quickly, in real-time, for patient emergency situations. Their goal was to feel comfortable about letting the patients roam around a larger section of the facility, but still know their exact location.

## The Solution

For the hospital's staff, the Telemetry Patient Monitoring System supplied vital data concerning patients' physical condition, including ECG, heart rate and SpO2, in real-time.

The addition of the ELPAS EIRIS™ Local Positioning System (LPS), which keeps track of exact patient location, results in a comprehensive solution ensuring that hospital staff is made aware of the status of the patient's physical condition as well as the patient's exact location in real-time. This is particularly important during a patient emergency, in which, of course, every second counts.



Name	Location	Area	Time Seen
Tel01	C.251	6 persoons kamer	06/22/00 12:14:50
Tel03	C.253	6 persoons kamer	06/22/00 12:14:49
Tel04	Koffiekamer	Algemene ruimten	06/22/00 12:14:48
Tel05	C.251	6 persoons kamer	06/22/00 12:14:50
Tel06	C.252	6 persoons kamer	06/22/00 12:14:49
Tel07	C.251	6 persoons kamer	06/22/00 12:14:53
Tel08	C.259	1 persoons kamer	06/22/00 12:14:53
Tel09	C.253	6 persoons kamer	06/22/00 12:14:52
Tel10	CCU 5/6	Harfbewaking	06/22/00 12:14:53
Tel11	CCU 3	Harfbewaking	06/22/00 12:14:49
Tel12	C.252	6 persoons kamer	06/22/00 12:14:32
Tel14	C.251	6 persoons kamer	06/22/00 12:14:52
Tel15	C.256	1 persoons kamer	06/22/00 12:14:52
Tel16	Hal	Hal	06/22/00 12:10:54

### How EIRIS™ works:

The EIRIS™ LPS is based on the innovative technology of Infra-Red and Radio-Frequency Identification (IRFID™). Patients monitored by the EIRIS™ LPS system carry a small patient badge that broadcasts signals. A group of sensors, namely Readers (RDRs), pick up the signals which then transfer the data through the Echelon network to an NT Server. The EIRIS™ Server processes the location data and reports the patient's location in real-time on a computer screen.

### How Telemetry System Works:

The Telemetry Patient Monitoring System uses Radio-Frequency (RF) technology to transmit physiological data, for each connected patient, to a central monitor.

By enhancing the system with the patient's location, on top of the known physical condition, staff members are better prepared to handle medical emergencies that may arise, and they can find the patients quicker to give them their medication. Furthermore, patients now become more independent to perform tasks on their own which translates into rapid recovery times.

### Recognized Benefits

- Improves staff efficiency in finding patients, in cases of: emergency, medication distribution, electrode contact adjustment
- Provides peace of mind for patients, family and staff
- Scalability enables simple addition of access control, equipment tracking, staff remote signaling and more
- Open architecture system design (Echelon's free topology RDR network) enables seamless integration to other building automation and security devices

## About ELPAS Ltd.

ELPAS LTD. - Local Positioning Systems (LPS), established in 1995, is a worldwide leading designer, manufacturer and marketer of automated Asset Tracking and Asset Management solutions based on its patented IRFID™ (IR & RF Identification) technology. Industries targeted are healthcare, intelligent buildings and industrial environments where indoor location and identification of equipment and people are critical to improve business security, communication and operations.



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