



## AIS Monitoring System Lake Maracaibo, Venezuela



### PROJECT OVERVIEW

<b>Location:</b>	Venezuela
<b>Date:</b>	December 2009
<b>Owners:</b>	Instituto Nacional Canalizaciones
<b>Site:</b>	Lake Maracaibo, Venezuela
<b>Product:</b>	SLC600 AIS Enabled Lanterns
<b>Application:</b>	Provision of accurate positioning and operational information about the AtoN

### BENEFITS

- Mariners are able to accurately determine their position to safely navigate through the channel
- Compact, theft resistant design
- Lantern and power supply status is monitored in real-time
- Alarms for buoy off-station and lantern faults enables owners to keep track of their installation remotely, saving on maintenance costs

### Contents of AIS Message 21

- Name of AtoN
- Type of AtoN
- Positioning (latitude & longitude measurement)
- ON position/OFF position status
- Time Stamp
- Dimensions of the AtoN & Reference Positioning

## 200 x SLC600 AIS Enabled Lanterns Increase Safety in Lake Maracaibo

Sealite Distribution Partner, Construcciones Taramar, has undertaken one of the largest AIS (Automatic Identification System) projects consisting of 200 x AIS fitted SLC600 self-contained 5-8nm lights installed on buoys in Lake Maracaibo, Venezuela. The project was undertaken by the Instituto Nacional Canalizaciones, which is the National Channel Authority.

Sealite's AIS monitoring system operates on the international VHF Maritime Mobile Band and provides mariners in the broadcasting region crucial Message 21 information (as defined by the International Telecommunications Union) such as AtoN operational status and positioning. In addition, the AIS enabled AtoN broadcasts AIS Message 6 to the designated base station allowing the operator to monitor the AtoN for solar and battery voltage, flashcode setting and light status.

The AIS monitoring system for the Lake Maracaibo was incorporated into Sealite's SLC600 6nm solar marine lanterns enabling each navaid to be remotely monitored allowing vessels to accurately determine their position and safely navigate through the channel.

Located in Venezuela, Lake Maracaibo is the largest lake in South America and is one of the oldest lakes on earth. The lake acts as a major shipping route to the ports of Maracaibo and Cabimas with a dredged channel connecting the lake with the Gulf of Venezuela. The surrounding Maracaibo basin is one of the major oil producing regions in the world making the region a major profit centre for Venezuela.

The project represents one of the world's largest AIS-AtoN deployments to date.