

LIGHTHOUSE ADS TO SCADA
NAVIGATION SYSTEM

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Approval

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ABSTRACT

“ Supervisory Control and Data Acquisition systems are computers, controllers, instruments; actuators, networks, and interfaces that manage the control of automated industrial processes and allow analysis of those systems through data collection .They are used in all types of industries, from electrical distribution systems, to food processing, to facility security alarms”[1].

A SCADA system is a common process automation system which is used to gather data from sensors and instruments located at remote sites and to transmit and display this data at a central site for either control or monitoring purposes. The collected data is usually viewed on one or more SCADA Host computers located at the central or master site. This system consists of 1 unit of master station or control room and 3 remote sites.

Control room is named Location 4 and located at Jabatan Laut Semenanjung Malaysia (JLSM), Port Klang where the latitude and longitude is $3^{\circ} 0'8.31''\text{N}$ and $101^{\circ}23'26.23''\text{E}$. Location 1 is a lighthouse, the name of this location is Tanjung Gelang located at Pahang, the latitude and longitude of the location is $3^{\circ}57'47.53''\text{N}$ and $103^{\circ}26'13.77''\text{E}$. Location 2 and Location 3 is located at state of Johor. Location 2 names is Tompok Utara and for Location 3 is Mudah Selatan. The latitude and longitude for Tompok Utara is $1^{\circ}27'36.00''\text{N}$ and $104^{\circ}27'3.79''\text{E}$ and Mudah Selatan is $1^{\circ}23'47.83''\text{N}$ and $103^{\circ}11'54.47''\text{E}$.

The SCADA software used to monitor the remote site status is CitectSCADA. CitectSCADA is an open source SCADA (Supervisory Control And Data Acquisition) system, which takes advantage of the performance and cost-efficiency of modern PC technology. The CitectSCADA system is controlled and supervised with the CitectSCADA Graphical User Interface.

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