# iVATS Satellite Remote Monitoring & Control System (iSRMCS)



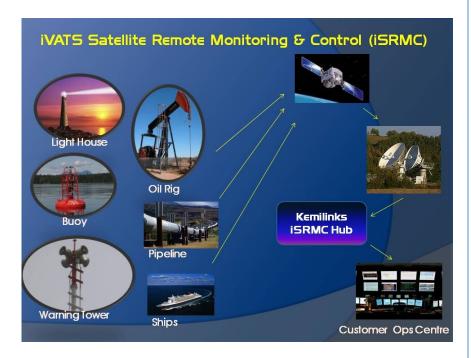
iVATS Satellite Remote Monitoring & Control System (iSRMC) is an satellite based network infrastructure developed and put in place by Kemilinks to cater to the growing needs of satellite based remote monitoring and control applications. It provides worldwide customers with the most reliable and cost effective solution of satellite remote monitoring and control of marine navigational aids and remote assets, lighthouses, buoys, and other remote installation which are in fixed locations or mobile.

Directly connected to various satellites operators, it gives our customers the flexibility to choose from a list of internationally established satellite constellations. iSRMC offer a selection of different satellite terminals to enable full coverage, low power consumptions and availability of functions to adequately deliver the best solution to different types of users.

iSRMC interworks with Inmarsat M2M terminals (ISATData Pro, D+, D2, ISATM2M, SAT series, DMR series), Inmarsat BGAN, Iridium 9602, Thuraya terminal, Globalstar terminal and other satellite terminals. The choice of type of terminal and satellite constellation will depend on coverage footprint of the satellite and the actual performance requirements of the users.

### **Key Features**

- Provides a ready satellite based network infrastructure to customer who needs to deploy a remote monitoring system expeditiously.
- Direct connection to various satellite operators.
- Connection with various sensors.
- Povides map view option.
- Cost effective and secured solution.
- Fully redundant gateway located in highly secured data centre in Singapore and Cyberjaya, Malaysia.





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## **Applications**

- \* Remote locations that have no or little communication infrastructure.
- ❖ Disaster warning systems that require robust and reliable communication infrastructure.
- ❖ Application that require secondary communication infrastructure backup.

#### iSMRC Hub

iSMRC Hub is designed and built with a comprehensive communication service layer that allows ease of direct connection to various satellite operators directly. The aim of the iSMRC is to enable customers to have a full satellite based remote monitoring and control system without the need to invest in the required hardware and software.

The hub forms the communication layer between customer applications and their remote devices. Satellite terminals are carefully chosen in considerations of the area of coverage, bandwidth required for the data transmission and cost considerations.

iSRMC remote terminal unit which is fully integrated with a satellite terminal will be used to interface with the remote devices. iSRMC remote terminal unit will collect all the data and sent to iSRMC hub for onwards transmission to customers' workstation via the satellite.

iSMRC is also designed with full capability in delivery a full operational centre setup with Graphical User Interface (GUI) which can be customised to meet customer needs. Reports format in excel or pdf is also available. iSRMC provides data such as

- Positional data with latitude and longtitude.
- Geofencing alerts for mobile assets.
- ❖ Event alerts and System status for Buoys, Land Rigs, Light Houses etc.
- Security alerts for access monitoring & control.
- Battery status.
- Sensors data such as flow rate, water level, pressure etc.
- Other vital information.

### **Satellite Terminal**

iSRMC is designed to work with various satellite terminal. Majority of the satellites work on the L-Band Frequency which is highly reboust and reliable against adverse weather conditions.

iSMRC has the full capability to remote configure these satellite terminals in terms of reporting interval, firmware upgrades and status monitoring.

Some of the satellite terminals, which are compatible with iSRMC, includes and not limited to:

