# **Energy and Utility**



# Project brief introduction

Energy and Utility Control Rooms are responsible for power distribution, controlling production, water systems, and waste-water management. These are critical resources, and their effective management relies on timely and well-presented information. Reliable display technology ensures your operations will run effectively. We can provide you with video displays configured to your needs, including SCADA (supervisory control and data acquisition).

#### Description

#### 24/7 Distribution Monitoring

There is a huge responsibility resting on the shoulders of utility providers. They are tasked with providing essential services such as water, gas, and electricity to industry and the public. To guarantee the efficiency of production and facilitate distribution, iSEMC can help you visualize the dynamic data you need, including grid information and serviced area data. With an iSEMC control room solution, you'll have optimized data visualization 24/7.

#### Best Technologies

Our video wall product range includes LED and LCD units, making iSEMC one of only a few manufacturers offering all the leading control room video display and visualization technologies. Therefore, we can fit all your needs and provide you with an ideal solution. Your utility management center needs to display various information such as grid information and serviced area data. This level of data requires a flexible, versatile solution for your control room. iSEMC has a wide enough range to cater to your needs, regardless of their complexity.

#### Full Visualization Solution Portfolio

A comprehensive overview of your network and assets is crucial to maintaining control and having effective communication. iSEMC's entire portfolio of visualization solutions enables you to have total control over multiple energy sites, both traditional and renewable, from one location. You can monitor water or gas facilities for leakage, giving you advanced notice of potential disaster.

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You only get this level of control by using the best visualization or media management systems. Our systems can offer you with the situation overview you require. iSEMC has one of the best track records in the business, and we understand the needs of utility companies. Our portfolio reflects this track record, and it will provide you with an incredible return on your investment.

#### **Future-Proofed Technology**

The information coming into your utility management center is real-time and comes from various sources, including network sensors, grid monitoring software, and service area data. This information must be presented as well as possible. These platforms are network-centric, come with open interfaces, are compliant with industry standards, and come with embedded security. Its modular and flexible nature means you can scale the system as your requirements change. Installing third-party technology is straightforward, increasing the utility value of our systems. Your stakeholders can access real-time information presented as well as possible.

We've also designed it to interface with the best 3rd party systems, and has compatibility with many AV & ICT sources. This compatibility ensures your infrastructure is constructed with the best components available. Last but far from insignificant, security has been embedded as this is a critical aspect of any infrastructure architecture.

#### **Features**

# Ultra high definition display

Appropriate designs can be made according to the project's real needs; the display system, mainly composing DID screen, DLP splicing screen, LED display screen with little space, the system can support multiple 1080P HD input sources and max input resolution supports up to 3840x2160@60Hz.Single channel max output resolution supports up to 3840x2160@60Hz. it also supports high resolution background map, up to 65535x65535 pixels.



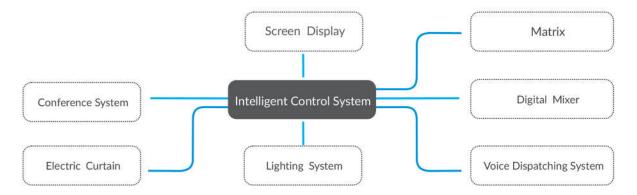
#### Real time

Real-time data can be released via the real-time data interface or WEB information, to provide users with corresponding realtime dynamic information



#### Multiple system centralized control

iSEMC command center system solution adopts advanced design concepts and products with leading technologies, plus of intelligent centralized control system, conducts centralized control for various systems, including large screen display system (DLP large screen / LCD splitting /LED display screen etc), video processing system, voice dispatching system, command and control system, system of sound pickup and sound reinforcement, to achieve information mining, assistant decision making, communication and command, centralized control; thus, the operation is more simple and convenient



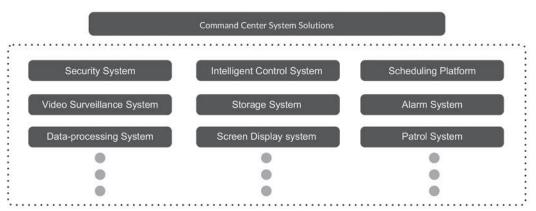
#### System visualization

Compared with traditional command systems, the iSEMC command central system realize visualization, and all subsystems are presented in the way of pictures, data, video, software interface; thus, the system is more intuitive and image.



## Compatible with third-party devices

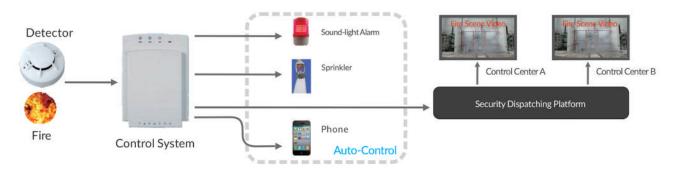
The system can be seamlessly connected with third party devices or software, to achieve the overall scheduling and control



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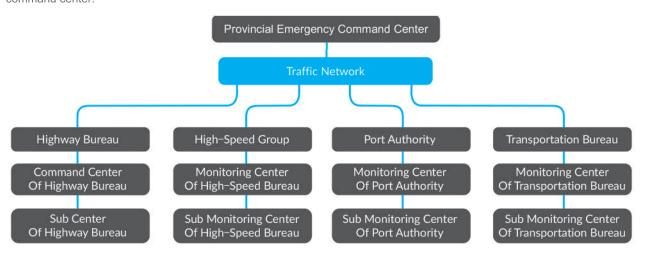
# Intelligent linkage control

When several devices needing control, the traditional manual control needs controlling multiple systems respectively. Equipment operation and switching speed depends on the level of personnel operation, needing for special control. The system can realize the intelligent linkage control of equipment by the corresponding logic, not needing manual operation.



#### Multi-level scheduling

The system combines voice, video, data and business flow as a whole, via IP network; a whole set of system can be dispatched in ministerialm, provincial and municipal centers respectively by the multi-stage deployment mode. The multi-level real-time intercom of command center can be realized by dispatching equipment with IP mode access to the command center.



## Decision-making support

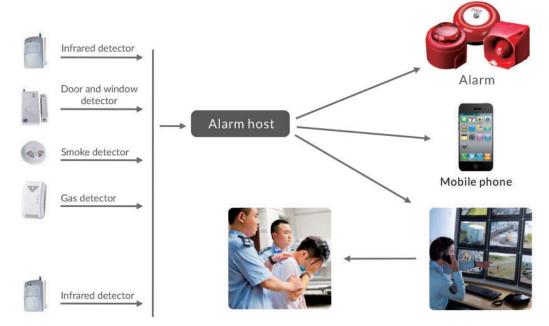
Decision-making support collects information for HD display system: all kinds of information collected and arranged by the system, plus of analysis calculation results of various models are shown in the most simple and intuitive form according to the needs of the decision makers, to help decision makers quickly and accurately understand the current situation, analyze the pros and cons of various scheduling schemes, as well as help them better to make the right decisions.





#### Linkage alarm

After installing infrared detector in the front-end and accessing to the backend alarm host which is connected with sound and light alarm, once the illegal intrusion is detected, alarms will be sent out, and a series of linkages will be launched according to settings, when various types of alarms are generated, all alarm information will be collected at the business client side. Planning and on-site scene of each alarm linkage can be managed via the alarming interface, finally all kinds of alarm information will do classified statistics through the alarm information statistics, and linkage can be generated with video equipment simultaneously, to transfer live video to the display terminal in real time which can realize the alarm linkage function.



# Recording & playback function

iSEMC command center system solution enables recording and playback feature in the appropriate work modes; video, sound and other contents (such as PPT) of the conference system and speakers can be simultaneously encoded into standard IP streaming format in full hardware device mode, and then transmit through the network. The post-process is conducted within the recording & playback platform, including picture dynamic synthesization, streaming media publishing etc.. Visitiors can instantly watch contents of the live audio-video and pictures via WEB or dedicated media player. Contents will be automatically stored in the server after meetings. Moreover, the system also provides VOD services.

## Stable and reliable

The system is stable and reliable because of adopting mature technologies, not infected with the virus; it has been successfully applied to a number of projects, with mature project experience.





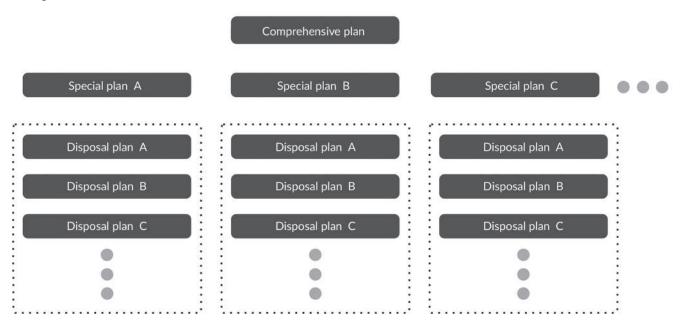




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#### Preset management

The research and development of contingency plans can be carried out via an integrated control management platform, to realize input and linkage settings of various contingency plans. A resource directory can be formed through the abstraction of pre-arranged data elements and information resources. The integrated control management platform can be automatically associated with the corresponding contingency plans in the event of different action. This is more convenient to help the management to make decision.



## Electronic map

Support 3D multilayer electronic map; easily define the monitoring points and the alarm points on the map; support zoom map; alarm can be displayed in the relevant locations on the map when alarming; view scene images and make PTZ control by clicking on the alarm icon





# Application industry







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