

Safe, secure, and reliable energy for Oil & Gas operations

Protect your infrastructure with
the PACiS energy management
and control system



Schneider
Electric™

Dependable energy for your Oil & Gas operations

Safety and reliability are paramount for all Oil & Gas operations. That's why having the highest level of electrical energy management and control is essential.

To provide the maximum return on investment, your Oil & Gas installation needs an energy management and control system solution that helps you:

- > Ensure safety and security at all times
- > Maximise energy availability for production
- > Optimise energy consumption
- > Integrate the entire electrical system
- > Minimise OPEX and downtime

Schneider Electric offers a proven energy management and control system (EMCS) solution for the Oil & Gas industry. Based on our industry-leading PACiS™ energy automation platform, PACiS EMCS is suitable for all power system configurations and is easily tailored to practically any installation.



1,000+
installations

around the world are already protected by PACiS solutions

What can PACiS EMCS do for your business?

PACiS EMCS lets you visualise and optimally manage energy under challenging operating conditions.



Increase personnel and asset safety

with built-in safety features, together with leading arc-flash protection, and best-in-class protection equipment



Streamline your decision-making

thanks to comprehensive data availability and smart monitoring, allowing insight for fast decisions and predictive planning



Boost availability and reliability

through architectures featuring redundancy and security, with IEC 61850-based power management functionalities



Reduce costs

via minimised downtime and optimised energy consumption achieved with the use of comprehensive monitoring, protection, and control features



Seamlessly integrate

the entire electrical system thanks to interoperability and proven process control system integration

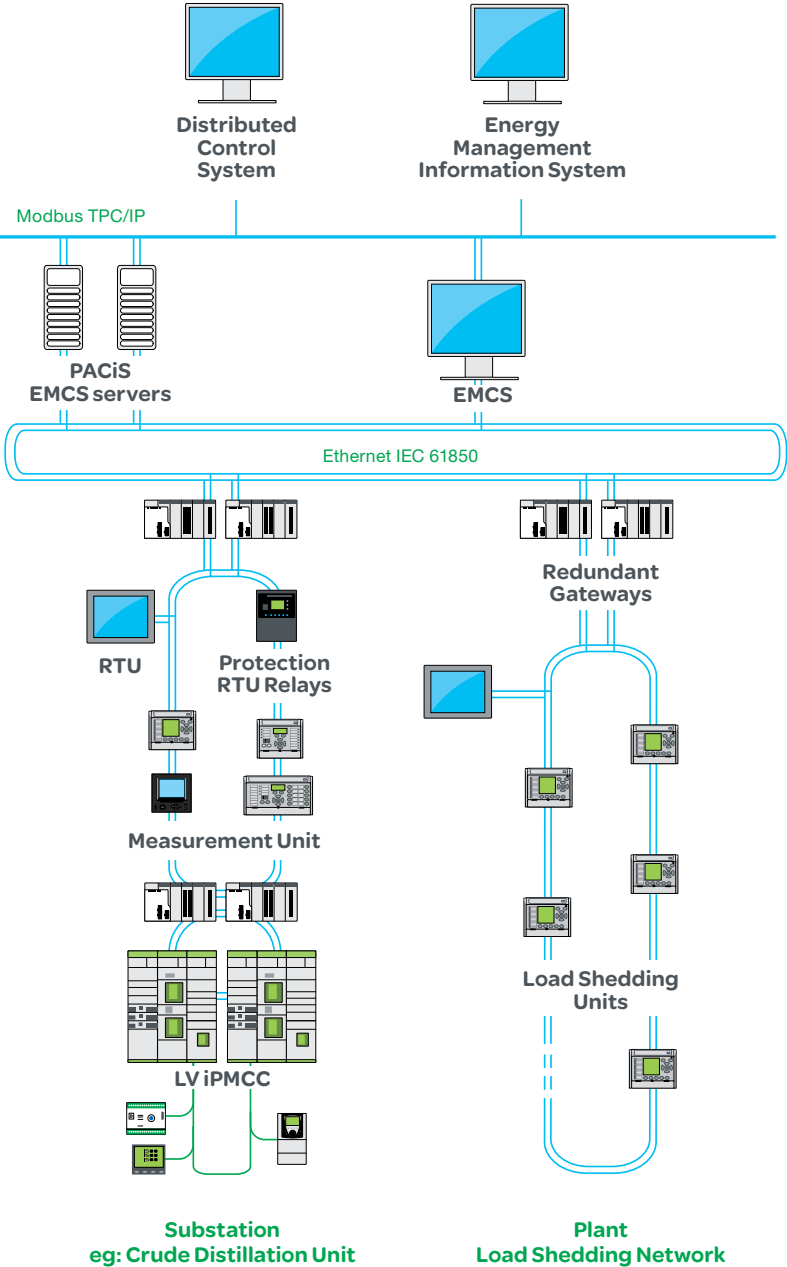


Advanced monitoring and control with PACiS EMCS

A solution for the whole electrical distribution chain

PACiS EMCS addresses the entire electrical distribution chain, from low voltage to high voltage switchgear, as well as generation sources. To achieve this, it combines state-of-the-art, field proven intelligent electronic devices in a highly available communication architecture.

This complete, secure electrical solution is complemented by dedicated functionality for power management and seamless connectivity to process control systems.



Visualise your plant in real time

Dynamic network monitoring and analysis

PACiS EMCS has an advanced and intuitive graphical SCADA HMI with continuous, real-time monitoring and dynamic status updates of the electrical system.

PACiS EMCS also provides fully secure controls when initiated by the operator, either locally or remotely, with appropriate authorisation and compliance with cyber security requirements.



Enhance
energy
efficiency

thanks to clear
visibility of your entire
electrical system

Improve efficiency with an integrated electrical system

Full system integration

PACiS EMCS links protection, measurement, and communication devices with local HMI and includes power management functionalities such as intelligent fast load shedding. The result is a scalable, efficient, and integrated system for the entire electrical system.

PACiS EMCS also integrates LV and MV intelligent power and motor control centres (iPMCCs) to monitor real-time motor data and provide redundant connectivity links to the process control system.



Seamless integration

of the electrical and process control systems gives you greater peace of mind





Proven IEC 61850 engineered solutions

Professional system engineering

Engineering a large electrical system is always time-consuming and complicated. However, the sophisticated Schneider Electric™ engineering tools for substation communication networks and system engineering use IEC 61850-compliant principles, architectures, and devices. This makes each electrical system simpler, more interoperable and efficient, and better optimised for its application.



Scalable

from a few megawatts
to a few hundred
megawatts



Advanced functionalities to maximise energy availability

Optimal generation management

Generation management enables proactive load sharing between different generators, allowing you to control and optimise import and generation of power. It also enables spinning reserve management.

Load restoration and motor start inhibit functions

Intuitive algorithms ensure fast sequential restart of loads based on priorities and availability of power to ensure operational efficiency.

Fast load shedding to fit your needs

PACiS EMCS offers both conventional under-frequency load shedding and intelligent fast load shedding (iFLS) based on IEC 61850.

A dedicated SCADA HMI for iFLS enables users to monitor real-time network status and override priority for shedding of loads.



Fast load shedding of **<80ms**

provides maximum energy availability for your critical infrastructure

Best-in-class devices to protect your facility

Protection and control IEDs you can rely on

Schneider Electric has a wide range of intelligent electronic devices (IEDs) to cover all power systems applications. These IEDs – such as MiCOM and Sepam – enable comprehensive control, monitoring, protection, and communication for power systems and assets.

These IEDs are engineered in compliance with the latest industry standards to enable best performance, interaction, and interoperability throughout the harsh substation environment.



Sepam



MiCOM



Over 1 million

Sepam and MiCOM devices installed, and counting

Leading arc protection, measurement, and control

Flexible communication and measurement devices

MiCOM and Saitel communication devices provide reliable control and communications between all components in the PACiS EMCS network, helping to ensure interoperability, high availability, and cyber security. At the same time, the PowerLogic range provides real-time energy metering, disturbance recording, and power quality analysis.



PowerLogic



Vamp

Arc protection systems

Vamp arc protection devices provide MV equipment and operator safety by reducing arc flash risk in your operations. They are ideally suited to reducing risk in Oil & Gas installations.



Detect and isolate an arc flash fault in just **7ms**

Count on world-class service and support

Global expertise, local service

Schneider Electric is a world leader in providing protection and control systems for electrical networks. We are globally present, with 24/7 support available and local service teams providing a wide range of services for the entire life cycle of your installation.

Schneider Electric experts are poised to assist you in increasing the performance of your electrical equipment and reducing the total cost of ownership through design applications, studies, hardware life-cycle management, and maintenance. They can also assist through proven training programs, preparing your employees to operate power systems in a safer, more reliable, and more effective manner.

Our experts in project engineering and project management have already helped install PACiS solutions around the world. Working with them gives you access to best-in-class expertise, worldwide innovation, and technical development in protection and control.



Reduce your total cost of ownership.



Click [here](#) to learn about our life-cycle management approach to planning, optimisation, and installation.

www.schneider-electric.com

Learn more about our solutions for energy automation.
Visit www.schneider-electric.com/energy-automation today!

Make the most of your energySM

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