

PS8000

SCADA
Supervisory Control & Data Acquisition

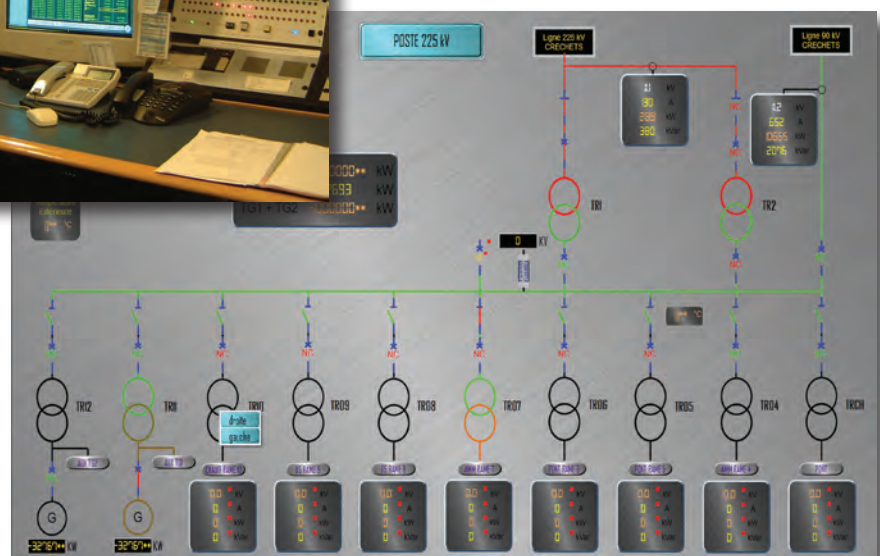


The energy consumption is more than ever a big concern for industry.

Whether you are operator, electrical manager, administrator of industrial sites, in charge of maintenance, or simply concerned by the management of an electrical network, the **PS8000** system will help you optimise your networks and make them more profitable.

CUSTOMER BENEFITS

- Supervises and commands the whole electrical network
- Assures the security of people and equipment
- Minimises operating costs
- Optimises maintenance
- Reduces electrical invoice



PS8000 Energy

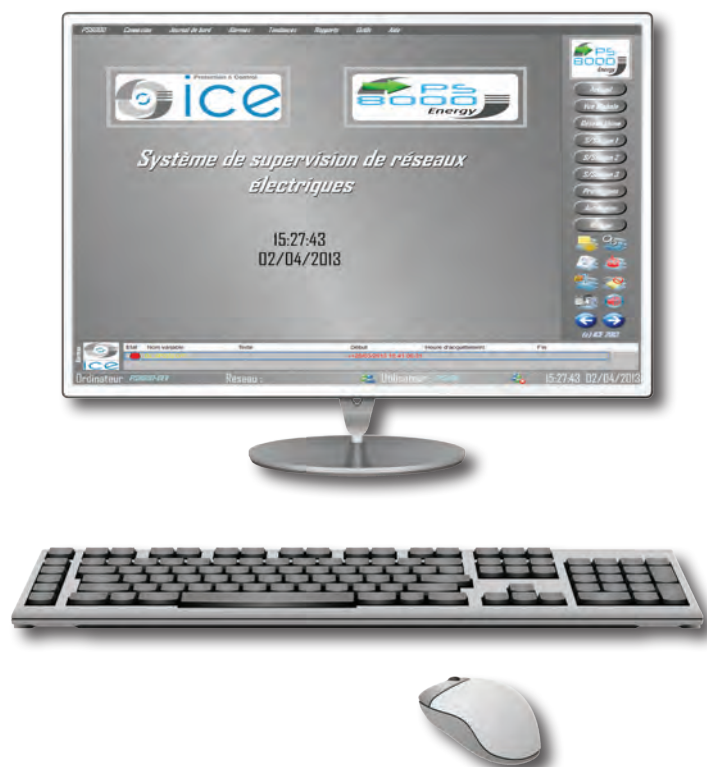
To fulfil the need of managers to assure the continuity of installations and the security of their staff, ICE proposes a financially accessible and evolving system called **PS8000**. The main part of this new generation system is the scada software called **PS8000 Energy**. It allows to identify, even eliminate, the reasons of defaults and by this to guarantee a safe environment. This system that centralises data and has a capacity of automation is a real tool that helps minimising the operating costs.

Thanks to the advanced functions of management such as statistics, results or automation of power cuts, **PS8000 Energy** helps to reduce and optimise your energy invoices.

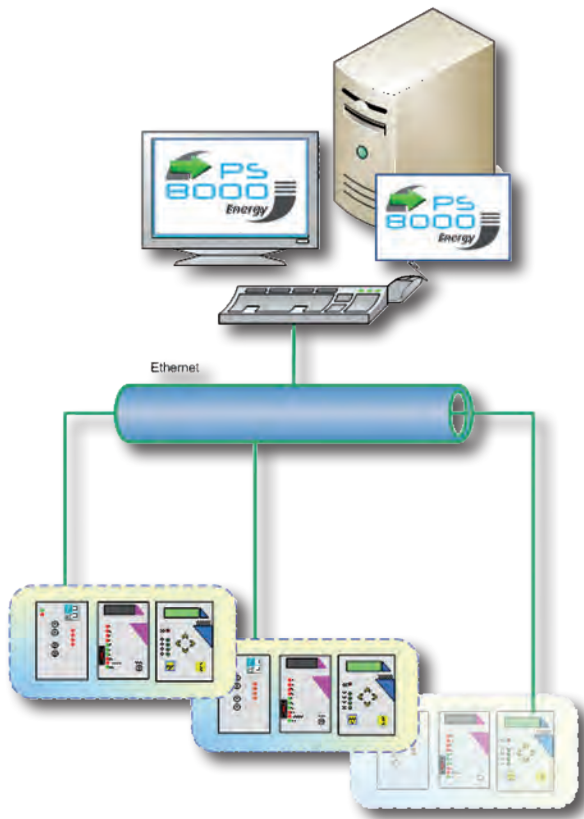
PS8000 is the latest version of the family of systems specialised in the supervision and command of electrical networks. It offers you a global solution with important advantages, particularly in the domain of liability, security of the processes and user-friendly functionalities.

More than a basic SCADA system, **PS8000** is a complete set of Hardware and Software which complies with all electrical requirements.

Based on a user-friendly configuration, open towards other systems, multilingual and easy to use, **PS8000 Energy** is a real help in decision making, allowing to react as fast as possible to faults.



From simple...



Covers all needs between field level (relays and data acquisition equipments) and the operator

Complete system from field to operator levels

Advanced functionality for energy management

- Full dynamic representation and coloring of the network
- Complete interface with relays and data acquisition devices
- Local PLCs for automatic functions
- Optional high speed load shedding

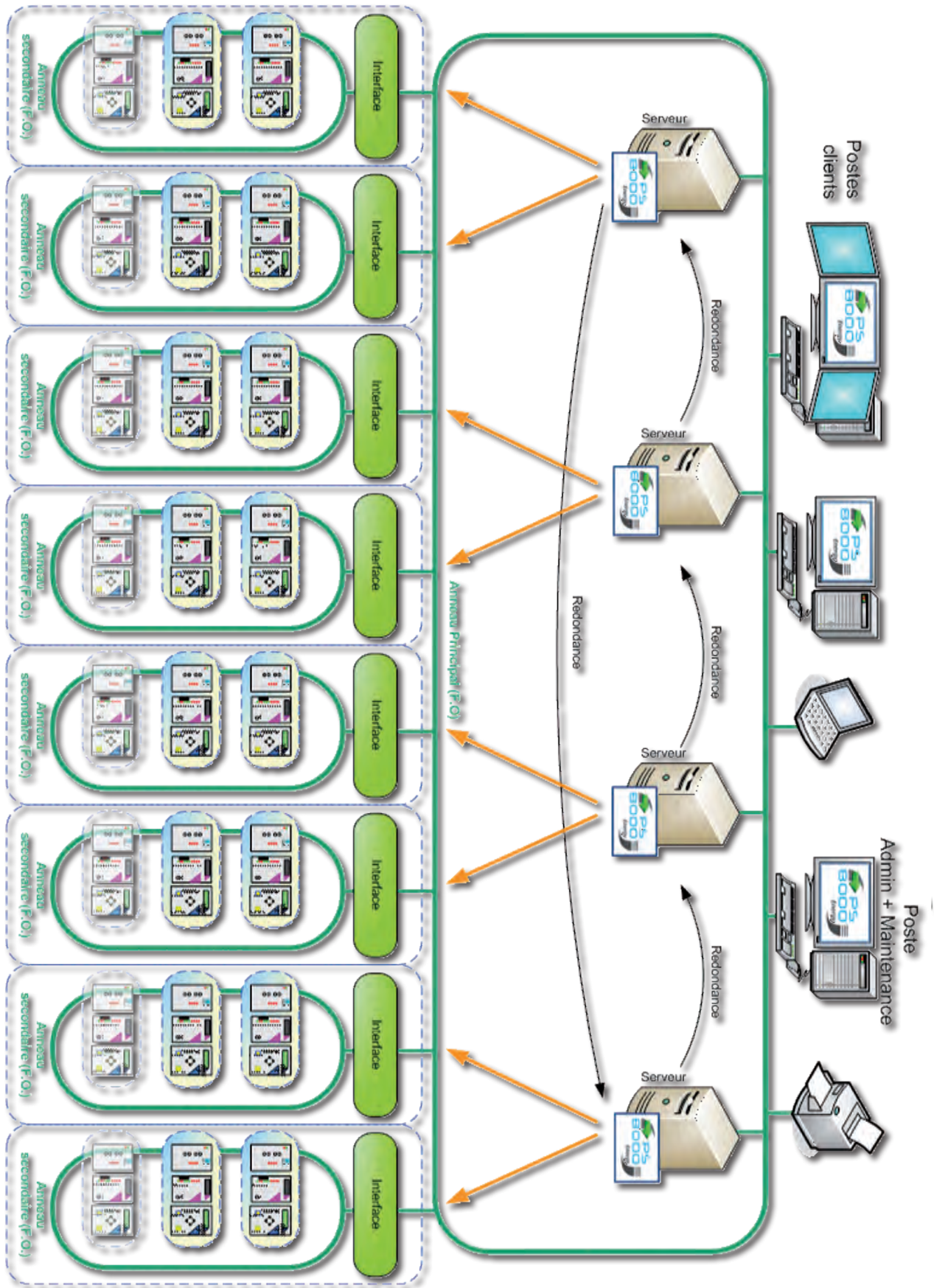
Advanced solution based on Ethernet

- Reliability and performance
- Industrial, evolving, adaptable solution
- Fast and sure
- Support of IEC 60870-5 and IEC 61850 protocols (and many more....)

Continuity of services ensured by redundancy

- On all levels of layers of the **PS8000**
- From simple configuration (two servers) to more complex applications (cluster of servers as a loop)

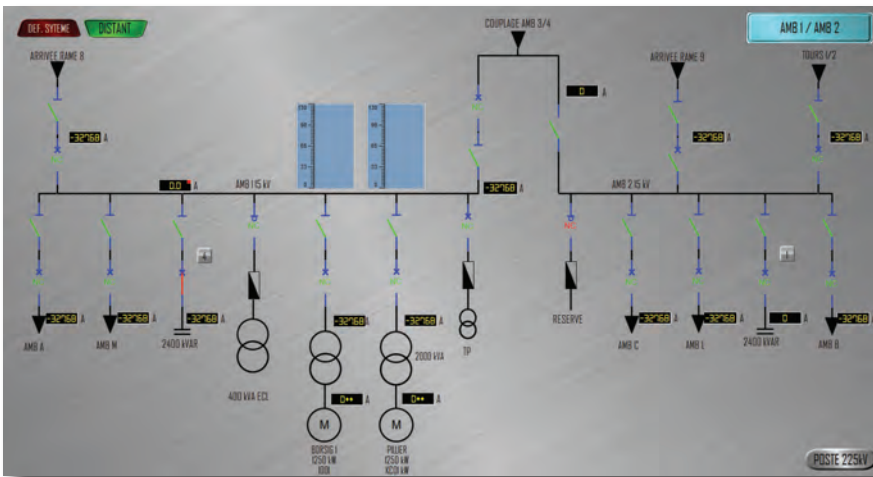
...to redundant multi-systems



Real-time update of synoptics, measures and energies

Real-time overview of the state of the electrical network:

- Status or value of any aperiodic information of all sub-stations
- Measures and energies
- Uploading of relay parameters



Journal de Bord

Heure d'apparition	Tranche/Organe	Nature
12:09:0012 10 10:38 550	POSTE 225kV COGENERATION DISJ 520 T02	NON COMPLEMENTAIRE OUVERT
12:09:0012 10 11 18 020	POSTE 225kV COGENERATION DISJ 520 T01	FIN DE NCPLT
12:09:0012 10 14 48 050	225kV_TR1 - 225kV MAXI1 TEMPORES	DECLENCHI
12:09:0012 10 11 16 020	POSTE 225kV COGENERATION DISJ 520 T01	FERRME
12:09:0012 10 14 14 030	225kV_TR1 - 225kV MAXI1 NEUTRE	DEBUT
12:09:0012 10 10 28 720	POSTE 225kV COGENERATION DISJ 520 T02	OUVERT
12:09:0012 10 10 28 720	POSTE 225kV COGENERATION DISJ 520 T02	FIN DE NCPLT
12:09:0012 10 10 13 140	POSTE 225kV COGENERATION DISJ 520 T02	NON COMPLEMENTAIRE OUVERT
11:09:0012 17 28 24 980	225kV_TR1 - 225kV MAXI1 NEUTRE	FIN DEF
12:00:0012 10 10 13 140	POSTE 225kV COGENERATION DISJ 520 T01	NON COMPLEMENTAIRE OUVERT
11:09:0012 15 35 26 700	POSTE 225kV_TR2 - 225kV SECTIONN 225kV	NON COMPLEMENTAIRE OUVERT
11:09:0012 17 28 21 210	225kV_TR1 - 225kV MAXI1 NEUTRE	OUVERT
11:09:0012 10 32 57 780	POSTE 225kV_TR2 - 225kV SECTIONN 225kV	OUVERT
11:09:0012 15 32 52 250	POSTE 225kV_TR2 - 225kV SECTIONN 225kV	FERRME
11:09:0012 14 57 32 180	225kV_T0 DISJ BAT 127V	OUVERT
12:06:0012 10 18 42 150		Utilisateur 'PS6000_1 - PS6000_1' loggué
12:09:0012 10 15 11 017		Utilisateur 'User4 - Utilisateur 4 (Admin)' loggué
12:09:0012 10 12 53 360		Le système a été démarré
12:09:0012 10 12 09 979		Le système a été arrêté
12:09:0012 10 06 21 520		Le système a été démarré
12:09:0012 09 32 41 591		Le système a été arrêté
12:09:0012 09 32 04 784		Le système a été démarré
12:09:0012 09 29 43 843		Le système a été arrêté
12:09:0012 09 28 50 580		Le système a été démarré
12:09:0012 09 28 21 676		Le système a été arrêté
12:09:0012 09 28 05 428		Le système a été démarré
12:09:0012 09 27 47 973		Le système a été arrêté

Event log

The event log records all events with a precision of 5 ms:

- Appearance/disappearance of events
- Appearance/disappearance of alarms
- Follow up of operator actions (discharge, sending of command and orders)
- Messages and errors
- Specific editions (recordings, results of sorting, parameters, measures etc..)

Alarmes

Etat	Heure d'apparition	Heure de disparition	Heure d'acquiescement	Tranche/Organe	Nature	Poste	Utilisateur
●	12/09/2012 10:14:46.050			TR1-30KV MANUTENUSION	DEBUT	Poste 225 kV	
●	12/09/2012 10:14:44.030		12/09/2012 10:15:16	TR1-30KV DECL. HT PAR THT	DEBUT	Poste 225 kV	Utilisateur 4 (Admin)
●	12/09/2012 10:10:13.140		12/09/2012 10:11:18.320	220KV NERATION DISJ. SDR 103	NON COMPLEMENTAIRE OUVERT	Poste 225 kV	
●	12/09/2012 10:10:50.050		12/09/2012 10:12:33.040	AMB 1 DEPART CONDENS.	NON COMPLEMENTAIRE OUVERT	Poste AMB	
●	12/09/2012 10:10:50.050		12/09/2012 10:12:33.040	AMB 2 DEPART CONDENS.	NON COMPLEMENTAIRE OUVERT	Poste AMB	

Alarm and event management

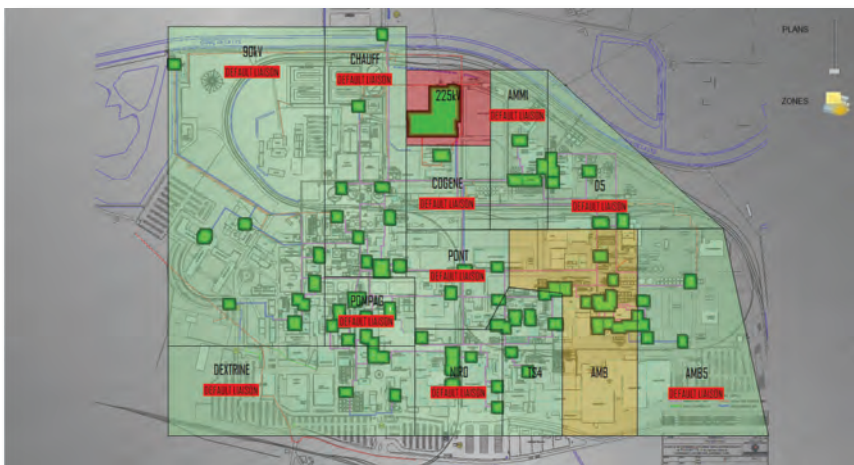
- User configurable list of alarms
- Appearance of an alarm is signalled by a sound alarm, a message on the event log, a make contact and a synthesis of events in a service window
- An overall list of current alarms, cleared or non-cleared, is available

Alarms geolocation

Grouping alarms by:

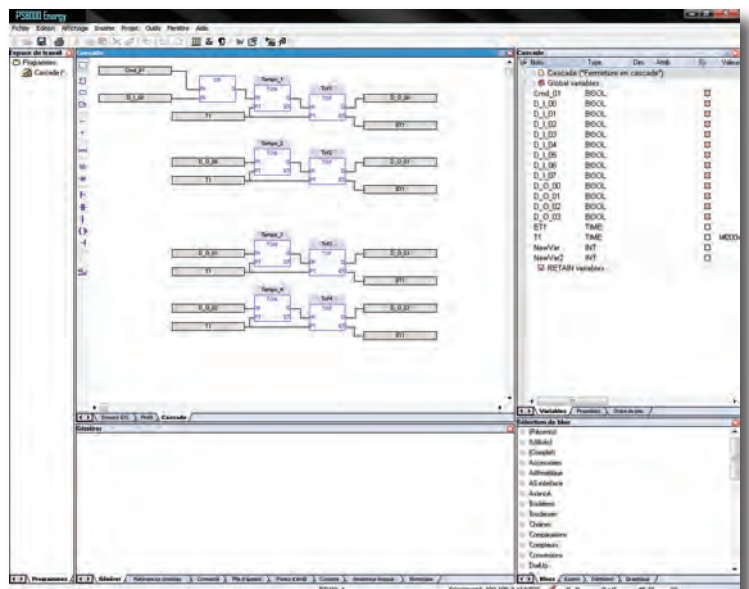
- Types
- Domains
- Groups
- Emergency levels

Visualization of bonding flaws



Local PLC embedded

- Powerful graphic editor (SFC, FBD, LD)
- Text editor (ST, IL)
- Fully compatible with IEC61131-3





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