

The products that make it all possible

There are not many control systems like those from ABB that combine advanced process control functions and fast digital PLC control. Both with the security of operation and economy you seek.

The advanced multi-functionality, the cost-cutting, compact modular design and distributed control capability of this SattCon family of control systems make them geared for the toughest tasks around.

Automatic modem dial-up functions to transfer the data or even to call up paging systems to alert service engineers, are integrated in the software as standard.

The systems can handle extremely complex communication requirements. Field engineers can check and modify set points from any point in the network without the need to return to a main control room. Data can be transferred either via a fixed line, dial-up connection or radio.

A model of modularity

Continuity and consistency are essential in a control system to provide the assurance that a specific process will constantly result in a product that meets stringent pre-determined specifications and quality demands.

Thanks to their open architecture, the individual control systems readily integrate with larger systems. Excellent data storage and data transfer capability in complex networks make them well suited to supervisory systems where they become a vital link in overall Manufacturing Execution and Management Information Systems.

SattCon 200

Full range of standard functions

SattCon 200 is a comprehensive process control tool for medium to large size applications. The same I/O units can be used either centrally or remote, and it is possible to combine the two in a single SattCon 200 configuration.

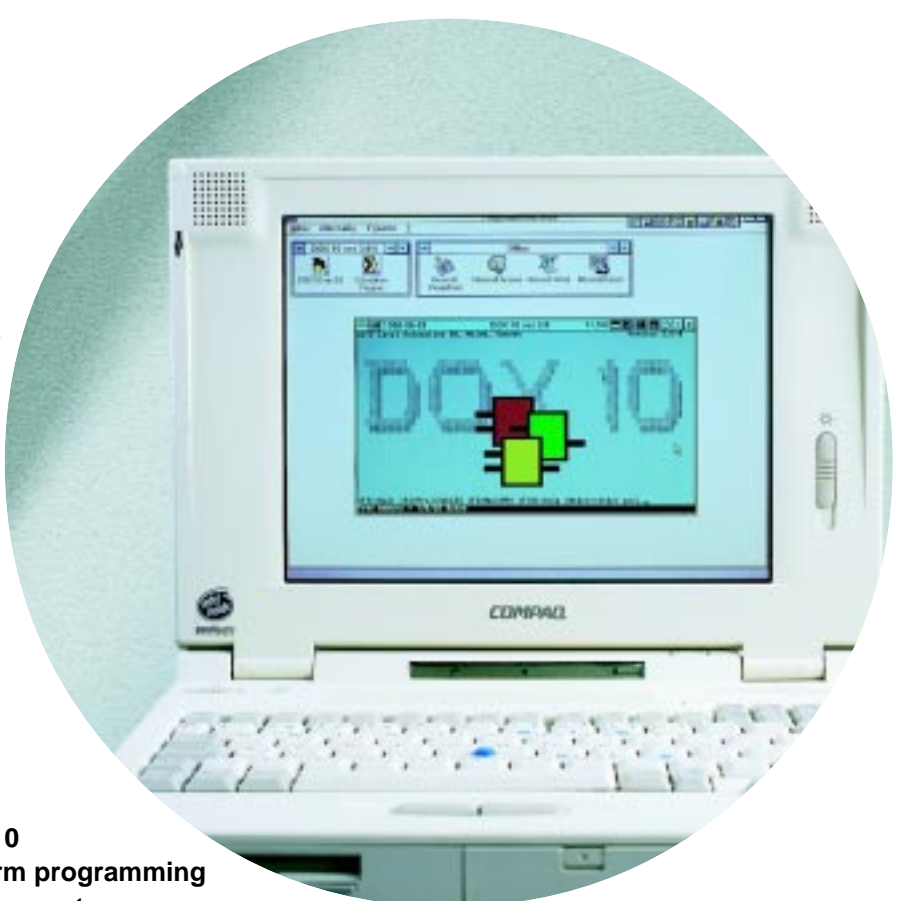
With many control systems, you have to accommodate various functions, such as alarm handling, outside the system. Not with the SattCon 200. The list of standard functions includes 16 separate PLC program modules, data storage, recipe handling, floating point calculations, excellent loop control capability, timers and counters, text handling facility, advanced alarm handling, ready-to-use PID controllers with Autotuner and integrated communication.

The compact dimensions save on space while the integrated terminal strips reduce cabling requirements, save installation time and increase installation reliability.



- Modularity facilitates configuration and expansion
- Same I/O units remote and central
- Choice of CPUs gives opportunity to optimise
- Safety functions in I/O
- Compatibility with rack-based systems

- On-line testing, tuning, trouble-shooting and programming
- Re-usability saves engineering time
- Minimal hardware requirements



DOX 10 Uniform programming environment

DOX 10 is a powerful multi-mode software development tool for the SattCon family of products. Easy to learn and easy to work with, it runs on a normal PC. It features libraries of standard modules. Debugged user-defined modules can be saved and re-used to save programming time and increase quality.

DOX 10 gives you five different programming methods – SFC (Grafcet), function block, ladder diagram, instruction list and structured text– and enables on-line testing, tuning, troubleshooting and programming.



- Extremely compact
- Large memory
- Mix and match - several combinations
- Integrated communication

SattCon 05

Most comprehensive system in its class

SattCon 05 is perfect for your medium to small application and can be used as a stand-alone control system or as a substation in a larger application.

It has a broad range of powerful, basic functions such as communication, calculations, sequence control, screen dialogue, timers and counters. Additional functions, such as PID loops, are dependent on the choice of CPU.

The ability to combine a choice of five CPU boards and five different I/O boards gives great flexibility when tailoring the system to specific control needs.

It features more I/Os in relation to its size than any of its rivals.



- Unique combination - control system and operator interface
- Low installation costs
- Eight-loop process control
- Large data storage capability
- Create own dialogue and display screen

SattCon OP45

All you need in one compact unit

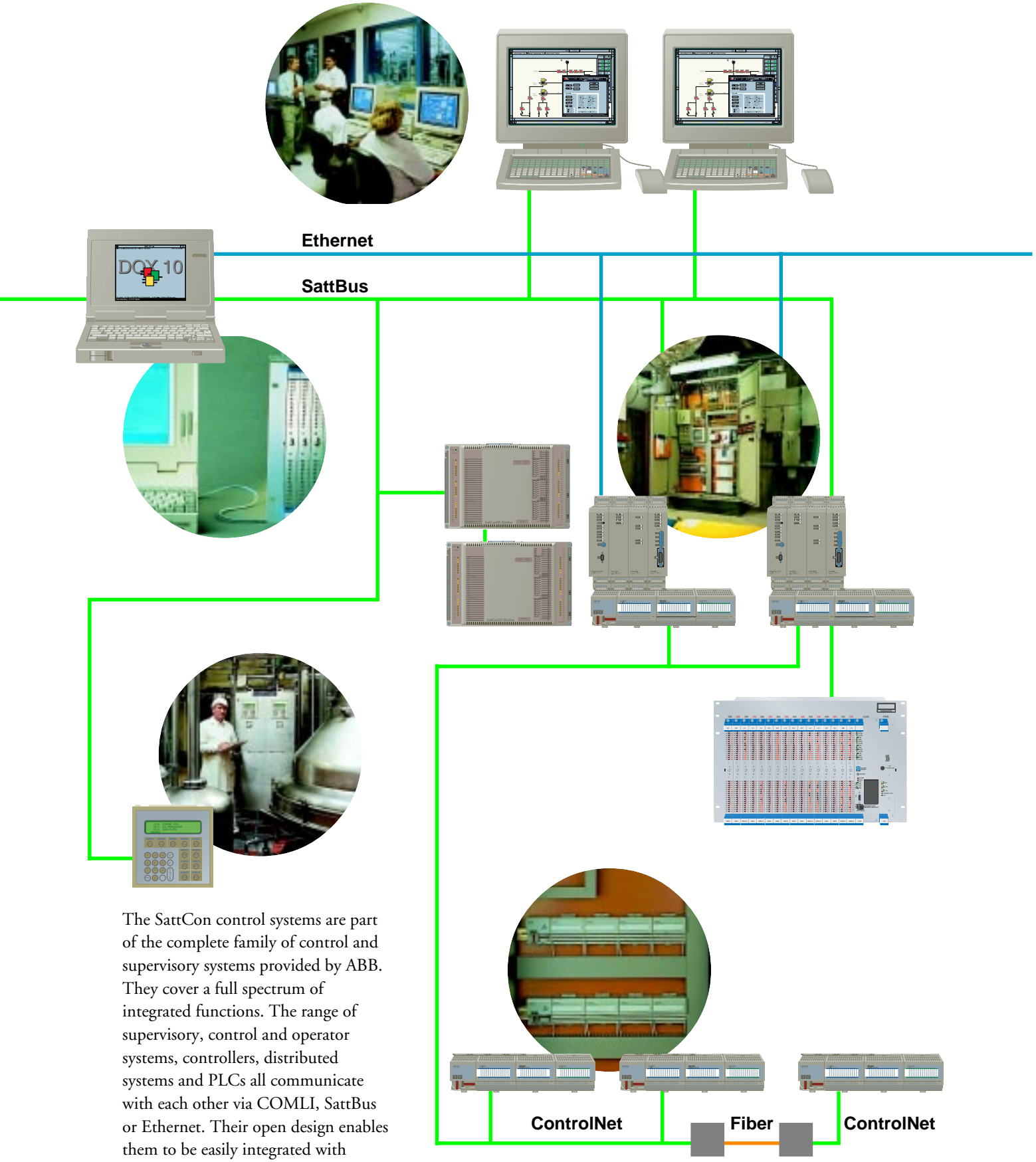
SattCon OP45 offers all you need for controlling a process or piece of equipment.

It packs four functions into its compact shell. SattCon OP45 is not just a rapid PLC. It is also an operator panel and display and an 8-loop process controller. It is used as a stand-alone unit or, with its integrated communication, it can become an ideal substation in a larger control system.

It features a comprehensive repertoire of instructions with a broad range of functions for various control applications.

A complete system for your control needs

Geared for the toughest tasks around



The SattCon control systems are part of the complete family of control and supervisory systems provided by ABB. They cover a full spectrum of integrated functions. The range of supervisory, control and operator systems, controllers, distributed systems and PLCs all communicate with each other via COMLI, SattBus or Ethernet. Their open design enables them to be easily integrated with different types of systems such as administrative systems and other brand control systems.

The hard facts

SYSTEM	SattCon 05	SattCon OP45	SattCon 200
Capacity			
No. of CPU versions	5	2	6
Max. digital I/O	240 ¹	180 ¹	>2000 ¹
Max. analogue I/O	64 ¹	48 ¹	>1000 ¹
Distributed I/O	*	*	*
Functions			
Calculation functions	*	*	*
Floating point calculation	*	*	*
PID loops	*	*	*
Autotuner	*	*	*
Gain scheduling	*	*	*
Instrumentation functions	*	*	*
Alarm monitoring & handling	*	*	*
Data storage	*	*	*
Reports	*	*	*
Text processing	*	*	*
Back-up to external media	*	*	*
Programming			
User-defined modules	*	*	*
Instruction List (IL)	*	*	*
Function Block Diagram (FBD)	*	*	*
Ladder Diagram (LD)	*	*	*
Sequential Function Chart (SFC)	*	*	*
Structured Text (ST)	*	*	*
Communication			
Communication via COMLI/SattBus	*	*	*
Communication via Ethernet	*	*	*
Dial-up functions	*	*	*
Programming via network	*	*	*
Certificates			
DNV approved for marine and offshore applications	*	*	*
UL certified	*	*	*
ABB is certified according to ISO 9001	*	*	*

¹ or a combination of digital and analogue signals. SattCon is a registered trademark of ABB.

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SattCon 200 • SattCon 05 • SattCon OP45 • DOX 10

