Saitel DP is a Schneider Electric backbone platform for real-time control and automation applications. Saitel DP is the most powerful member of Schneider Electric Saitel family of highly-evolved field devices and offers a solid communications, applications and integration platform for process automation and systems management with numerous worldwide references.

Saitel DP is distinct in that it can concurrently support a high number of Fast-Ethernet connections, legacy and standard communication protocols and sophisticated automation and control applications. Based on a modular design and open architecture with a wide variety for I/O and communication capabilities, this powerful platform offers optimum resources to develop specific software applications for the different Schneider Electric business areas (electric, gas, environment, traffic and so on) based on a “common baseline” platform.

**Saitel DP Advantages**

Based upon an extendable distributed architecture that employs a series of intelligent modules, and featuring enhanced functionality and power, Saitel DP offers:

- The ability to monitor and control thousands of I/O points.
- Operational redundancy for power supply, CPU, communications channels, or for the entire system (supporting automatic failover with hot-swap).
- Extensive library of standard and legacy protocols for information exchange between multiple masters and RTU.

- I/O acquisition modules with signal conditioning and integrated time synchronization (1 ms) and independent time stamping.
- A data acquisition subsystem based on the standard Profibus-DP serial field bus to support flexible configurations and allow for the integration of any type of Profibus-DP-compatible hardware.

The Schneider Electric Saitel family is composed by devices for data acquisition and communications applications, is the basis of our field systems and supporting our activities in the Energy, Traffic, Transport and Environment. Schneider Electric continues to invest significant R&D efforts in the Saitel family to incorporate the latest technological advances, at a reasonable cost, but maintaining its security and robustness.

In addition to its power and application versatility, Saitel DP offers:

**Modularity & Reduced Maintenance Costs**

Modularity is one of the Saitel DP’s most unique features. The processor, input/output (I/O) and communication modules have identical housings. The modular design allows for a unit to be assembled and modified as quickly and simply as possible.

Modularity maximizes flexibility while allowing a common hardware to reduce capital costs. Modularity also allows repairs to be completed quickly and simply, keeping operational downtime to an absolute minimum.
High Processing Capability
Saitel DP offers two types of CPU

- **SM_CPU866: Standard CPU.**
  Also it is available with two optical fiber ports (SM_CPU866FX). It has a high processing capability using a 32-bit Motorola® PowerPC® RISC microprocessor at 100 MHz and the VxWorks® realtime, multitasking OS. Its impressive processing power can run sophisticated automation applications with uncompromising performance.

- **SM_CPU866e: High-Performance CPU.**
  Uses a 32-bit dual-core microprocessor (Freescale QorIQDual) at 800 MHz, which provides double processing capacity for the applications. 4 Gigabit-Ethernet ports are available and two of them could be installed using optical fiber.

SM_CPU866e allows Cybersecurity and also the latest evolution of the standard IEC61850, using Linux as operating system. This OS takes advantage to the maximum of the processing capacities (multiprocess, multitask and multiuser are allowed), without needing the payment of license.

Saitel DP vs Software
The hardware Saitel DP platform has been designed to operate using the software baseline platform which offers different functionalities and tools for configuration, control and monitoring the RTU.

Saitel DP Family
This family offers the following range of modules:

- **SM_CPU866:** Standard control unit.
- **SM_CPU866FX:** Standard control unit with 2 fiber optic ports.
- **SM_CPU866e:** High-performance control unit.
- **SM_SERS/SM_SER:** Synchronous and asynchronous communication multiplexer.
- **SM_PS:** Standard power supply.
- **SM_PS40:** High-performance power supply.
- **SM_D132:** 32 digital inputs.
- **SM_DO32T:** 32 digital outputs to transistor.
- **SM_DO16R:** 16 digital outputs to relay.
- **SM_AI16:** 16 analog inputs.
- **SM_AI8AO4:** Analog inputs and outputs combination.
- **SM_BPX:** Mounted in a panel on the cabinet’s bottom.
- **SM_CHX:** Assembly on the chassis.
- **BP2F:** RS-485 to fiber converter.
- **MSAC / MSAP:** Switching and broadcasting module.