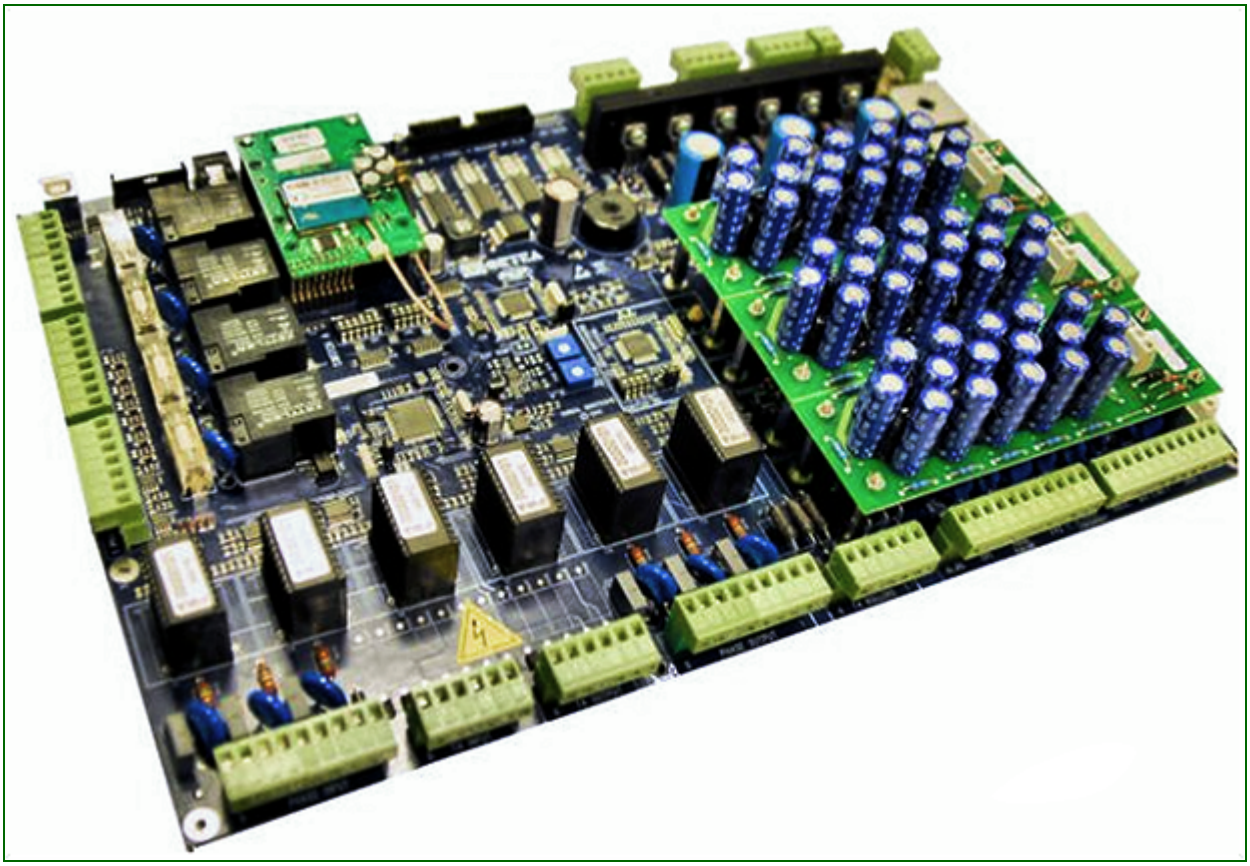
Three-phase – 'SIRIUS' (125kVA to 6000kVA)

(independent phase voltage control – columnar voltage regulator)
remote control system via ethernet or GPRS modem

SELECTABLE OUTPUT VOLTAGE (PC and Ethernet)	from 210V to 255V (L – N) from 360V to 440V (L – L)
FREQUENCY	50/60Hz ±5%
ADMITTED LOAD VARIATION	up to100%
ADMITTED LOAD UNBALANCE	up to 100%
COOLING	Natural Air (Aided over 45°C)
AMBIENT TEMPERATURE	-25/+45 °C
STORAGE TEMPERATURE	-25/+60°C
RELATIVE HUMIDITY	95%
ADMITTED OVERLOAD	200% 2min
COLOUR	RAL 7035
PROTECTION	IP 21
INSTALLATION	Indoor
REGULATOR OVERLOAD PROTECTION	DIGITAL STAND-BY CONTROL
COMMUNICATION SYSTEM	ETHERNET / GPRS / USB

Further details in the technical data tables

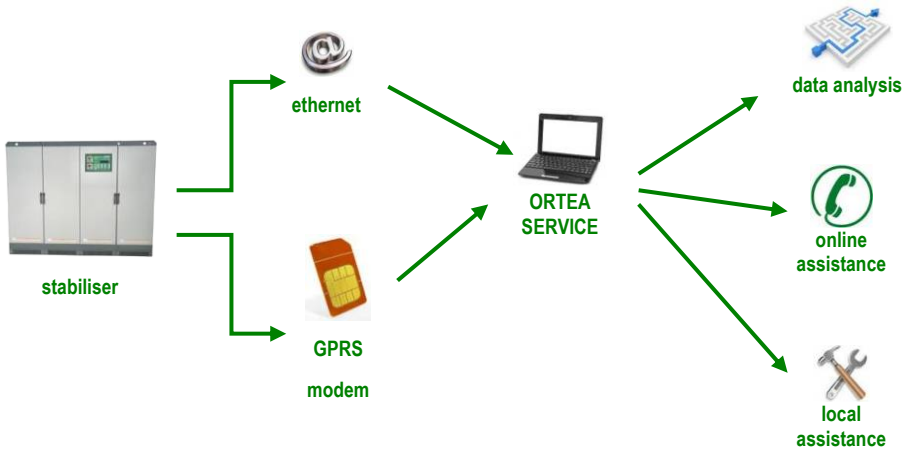


New generation multi-purpose control board
fitted with two DSP microprocessor, bodyguard microprocessor and GPRS modem

SIRIUS stabilisers are based on ORTEA columnar voltage regulators which allow for high ratings (up to 6000kVA) to be reached and achieve solid and reliable construction in order to satisfy any industrial need. The three-phase SIRIUS line allows for the choice of several input voltage variation percentages within a broad range (from +30% down to -45%).
The SIRIUS voltage stabilisers are supplied with independent regulation on each phase, therefore, the presence of **the neutral wire is required**. The stabiliser can also operate without neutral wire by adding a Δ/z_n isolating transformer or a neutral inductance).
The SIRIUS type is used when the main is unbalanced and it is suitable for supplying three-phase loads, two-phase loads and single-phase loads. The stabilisers are air cooled, with natural convection up to 45°C and aided by fans when temperature is above 45°C.

The measuring instrumentation for the SIRIUS stabilisers is incorporated in a control panel on the cabinet door and consists of **two multi-task digital network analysers**. Such instruments are able to provide with information regarding the status of the lines upstream and downstream the voltage stabiliser such as phase and linked voltages, current, power factor, active power, apparent power and reactive power. The readings are stored locally by the control system and (if the Ethernet connection is established) sent to a server at Ortea's HQ, thus providing the Service centre with the necessary information.
The front panel is provided with a user-friendly LED interface which allows for a complete monitoring of the unit. LED lights are provided for each phase signalling 'power on', reaching of voltage regulation limits and direction of voltage regulation (increase/decrease). Alarms for minimum and maximum voltages, maximum current, over-temperature, cabinet overheating and maintenance required are also indicated. The alarm indicators are accompanied by an acoustic alarm.

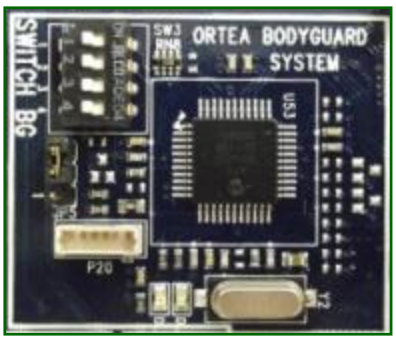
The control system has been renewed and it is able to interface with the Internet thanks to its capability to connect with **ETHERNET and GPRS protocols**. This allows for a remote monitoring of the equipment made by ORTEA at its headquarters, thus guaranteeing prompt assistance worldwide.



The control system is also provided with **two USB ports** for downloading the stored data on a memory key and uploading setting parameters if operating modifications in the system are needed.
It's also possible to update the control firmware either with USB port or with Ethernet connection.
The SIRIUS stabiliser is provided with an electronic voltage regulator protection system activates in case of overload on the voltage regulator. In such condition the load supply is not interrupted, but the stabiliser output voltage is automatically set to the lower between the

mains voltage and the pre-set output voltage. The service continuity is guaranteed, although the voltage is not stabilised. When the overload condition ceases to exist, the stabiliser switches automatically back to regular functioning.

The logic control, performed on the true RMS voltage, is based on **two 2-way DSP microprocessor** (one performing the control and the other one managing the measurements). The user can monitor the system and set all the parameters of the stabiliser via a PC connection.



The whole system is supervised by a third **'bodyguard' microprocessor** controlling the correct functioning of the other microprocessors.

The output voltage is reset to the minimum value in case of blackout by means of supercapacitor banks in oder to ensure the correct shutdown.

All SIRIUS stabilisers are provided with SPD surge arrestors Cl. I and Cl. II.

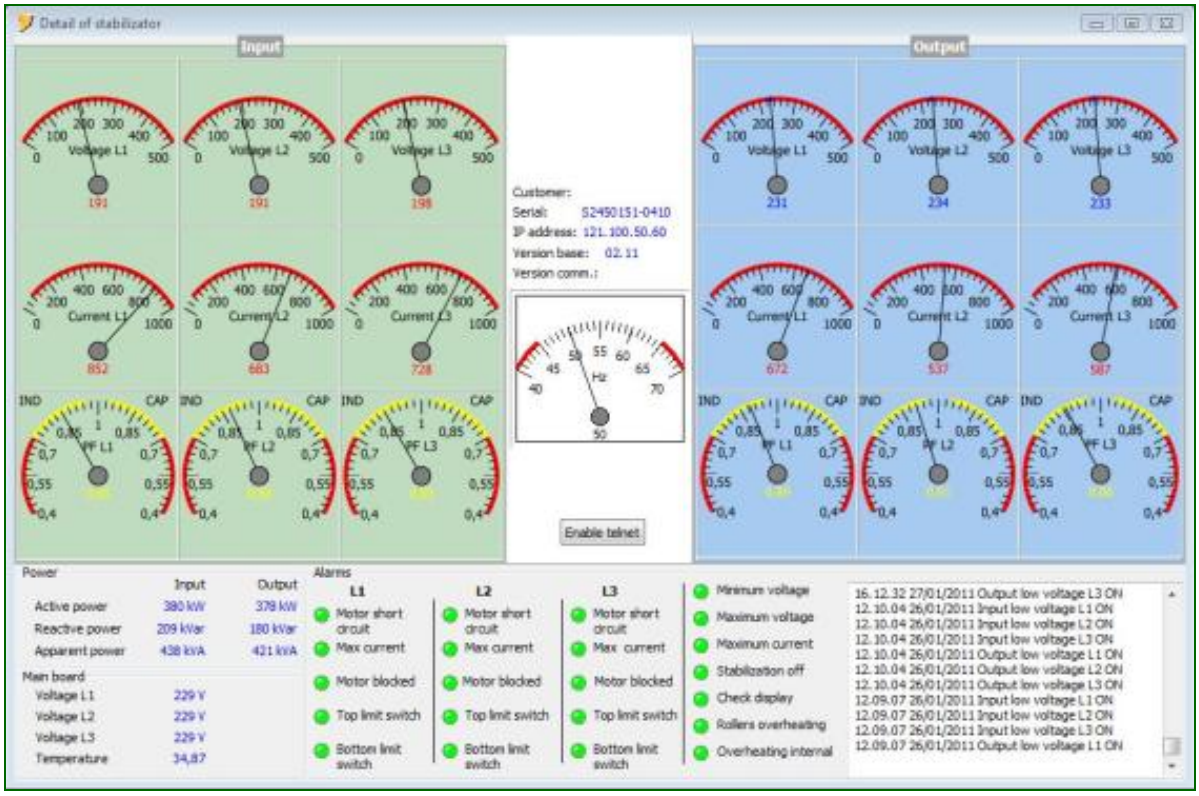
Remote communication system

The new all-in-one control card manages also the remote communication to the voltage stabiliser.

This remote data monitoring system enables the user and Ortea Service Centre the chance of monitoring on-line the stabiliser wherever installed by means of specially designed software.

The card is fitted with a local display (showing alarms and setting parameters) and with a keypad.

Should the Ethernet connection not be available, the remote communication can be performed via an **embedded GPRS modem.** A common SIM data card purchased locally and inserted in the modem allows for a simple data transmission.



Remote monitoring page