



Case Study 21443 – The Fourth People's Hospital of Qiqihar - Medical



Customer: The Fourth People's Hospital of Qiqihar

Background: Founded in December, 1989, the Fourth Affiliated Hospital of QMU (original Qiqihar Specialized Hospital of Harbin Railroad Bureau) was placed under the management of QMU in 2004. Qiqihar is a city of the Heilongjiang Province, located in the north eastern most part of China. It faces Russia across Heilongjiang River and Wusuli River to the north and east, borders Inner Mongolia to the west and Jilin Province to the south.

Located in Jianhua District of Qiqihar City, the total area of the Hospital is 35,000 square meters with a building area of 8,700 square meters. The Hospital has a staff of 101 including 86 medical technicians and 200 patient beds.

The Fourth Affiliated Hospital is composed of 11 departments, which include Psychological Therapy Department, Physical Exercise Therapy Department, Recreational Therapy Department, Prevention and Health Care Department, etc.. X-ray Diagnostic Unit, GDBS1018 Video Quantitative Number Electroencephalograph, B Ultrasound, Electro-Cardiograph, and Psychological Computed Tomography were equipped.

Problem: The hospital had recently purchase a new GE Spiral CT machine and needed a stable power supply free from high frequency interference.

Solution: **IP22, 80KVA PropSava 3 Phase Power Optimisation Electro-Servo System** – Input Voltage 380V \pm 20%, with output regulated at 380V \pm 2%; EMC anti-high-frequency interference filters; automatic power-on; over and under-voltage protection; phase sequence protection; over current protection with automatic by-pass system

Effect of installation: The hospital and its staff have been operating the new CT Scanning equipment for the last 2 years without any problems.



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Power Optimisation - Reduced Maintenance and Longer Life for all your Equipment:

By allowing electrical equipment to operate at a higher than manufacturer specification of voltage leads to significantly higher energy consumption, increased heat losses and a reduced life span.

Whatever the value of the incoming voltage into your site, whether it is **over** or **under** voltage, the **PropSava Power Optimisation System** will always tightly control the output voltage. It is this powerful and rapid regulation of voltage, coupled with high quality components and build that delivers the significant protection to site equipment; with power and cost savings; and reduction in CO2 emissions.

The Reason for Ever Increasing Changes in Voltage Levels:

Over and under voltage is generally a chronic problem aggravated by a number of factors beyond the end user's control. Electric utilities try to maintain voltage levels delivered to customers at $\pm 5\%$. However, factors like weather, high demand and others can cause the utility voltage to fall within a $\pm 10\%$ range. Even under ideal conditions, most customers will see a drop in utility voltage levels over the course of the day.

Distribution system characteristics can also contribute to chronically low voltage situations. For example, customers at the end of a long distribution line may be subject to a permanent voltage drop due to line losses on top of the utility voltage variations.

Protection

All **PropSava single and 3 Phase Power Optimisation Systems** have a surge arrestor fitted as standard. Surges are short-duration peak voltages – i.e. transient voltages – existing for only milliseconds; but can measure thousands of volts.

In the commercial sector, lightning or power surges cause 45% of electrical equipment damage. Overall, 28 out of 100 cases of damage to electronic equipment are caused by surges. Surges are by far the most frequent cause of damage.

Lifecycle and Warranty

All **PropSava Power Optimisation Systems** are built for 20 – 40 year lifecycle, and warranted against failure for up to 10 years.

Find Out More – <http://www.vanguardspower.com>

If your company wants to:

- Reduce your power and electricity costs;
- Increase the life cycle of your electrical equipment;
- Reduce the cost of equipment maintenance and repairs;
- Reduce you CO2 footprint

Call us today for a quotation or the name of your nearest Distributor