

CASE STUDY

ANHUI PROVINCIAL POWER GRID CONTROL CENTRE, HEFEI: ALL LIMITATIONS SUCCESSFULLY OVERCOME

Datwyler is supporting the Anhui Provincial Power Grid Control Centre in modernising its IT network with an interference-resistant intelligent cabling solution.

The central hub for the power supply in Anhui Province is the Power Grid Control Centre building in the provincial capital, Hefei. Since 2007, the stability of the power distribution network has been monitored, power flows controlled and disruptions resolved from this location. Fast and reliable data communication is essential for these demanding tasks.

Since 2024, Datwyler has been supporting the Power Grid Control Centre in the comprehensive modernisation of its existing IT network. The project focuses on the central network distribution in the data centre and encompasses over 150 racks. It was implemented in three phases to ensure uninterrupted business operations.

Intelligent solution for a demanding scenario

The Power Grid Control Centre building has extremely high requirements regarding the stability, electromagnetic immunity and intelligence of its cabling infrastructure. Datwyler has developed a customised solution for this, combining a shielded system of Category 6 cables and components with intelligent electronic patch panels and the DatAIM cabling management software. This is complemented by a high-performance fibre optic backbone.



The shielded copper cabling system offers high immunity to electromagnetic interference emanating from the power supply equipment, thus ensuring reliable high-frequency data transmission. The intelligent patch panels, in combination with DatAIM software, enable features such as real-time monitoring of all data ports, unique identification of patch cables via light signals and alarms in case of unauthorised access. This significantly simplifies the operation and maintenance of the cabling.

The first two phases of this modernisation project were completed on schedule in 2024 and 2025. The third and final installation was successfully completed by June 2026.

The Datwyler solution successfully eliminated the limitations of conventional cable management. The reliability and operational efficiency of the Power Grid Control Centre have improved significantly with the new network.

The on-site management team is highly satisfied with the intelligent cabling solution and the benefits it delivers in day-to-day operations.

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