**Overview**

To sustain a high-reliability communications network, it is necessary maintain a continuous electrical power supply to communications equipment. At NTT, for many years, we have been constructing high-reliability power-supply systems that supply power to switching equipment and transmission equipment without interruption. In recent years, ICT (information-communication technology) equipment—which has taken on a main role in place of switching equipment—has become more densely packed, and the amount of such equipment with high power consumption has been growing. Consequently, high-reliability direct-current (DC) power-supply technology (for supplying electricity safely) has also been established for ICT equipment with large power consumption.

This technology can prevent oscillation trouble before it happens and minimize adverse affects in the case of power-source short circuits.

**Features**

- Power supply is maintained without interruptions even during power outages
- High current (up to 140 A) per single line can be supplied
- Oscillation faults (which periodically vary with supply voltage) can be prevented
- Voltage fluctuation during short-circuit faults is suppressed, and its influence on operation of other ICT equipment is avoided
- Recommended conditions of ICT equipment are published in Technical Requirements

**Application scenarios**

- Power supply for large-capacity ICT equipment used for next-generation networks (NGNs)
- High-reliability power-supply system for data centers
- DC power-supply systems forecast to become popular in the home and offices of the future