Technology translator for past & future system integration.
RTU540 product line.

Gateway product for distribution and sub-transmission. Bridges old and new technology and combines existing devices and new standards protocols (such as IEC 61850) in one substation automation system.

RTU540 incorporates advanced features like programmable logic control and a human machine interface allowing for instant insight into the status of the grid. The high-quality, compact metal housing includes input and output modules which lead to space savings in the control cabinet.

Your benefits
• Powerful protocol gateway to bridge old and new technologies in one system
• Intelligent device for automated load and voltage control
• Robust and compact housing for fan-less operation enables you to handle a complex network due to distributed intelligence
• Agile functionality allows easy adaption of automation based on changing system requirements
• Selective interpretation allow fast decision making in the network control center and safes primary equipment
• Communication redundancy for peace of mind and confidence in your network
• Wide-range power supply makes additional DC/DC converter unnecessary
• User-optimized hardware design allows easy and fast SD-card handling
• Cyber security features to protect critical infrastructure

Application examples
Being responsible for a whole network puts you in the situation where some devices might be brand new while others are working since a very long time. RTU540 is the perfect product for you to bring them together in one system. As a gateway between IEDs and network control system (communication protocols and station bus) it is able to interpret information from all standard protocols. Additionally our gateway is perfect if you want to integrate serial I/Os into your digital station bus.

We offer full protocol support and are able to digitize your data. The changing topology of modern electric networks requires a constant voltage control. This can be automated with the integration of RTU540 in the transformer. The device can independently from the network control center control the voltage levels and send signals to adjust them. This gives you the time to focus on more important topics in the control center and peace of mind that the RTU540 is the reliable solution for automation.
Application example

Automation of primary distribution substation
- Gateway between IEDs and Network control system
- Interfacing of station level I/Os into station bus
- Integration of serial IEDs into station bus
- Transformer monitoring and control
- Voltage control

RTU500 series
Intelligence distributed across your power grid
Our RTU500 series brings the information from the physical power grid to your SCADA system. The modular Remote Terminal Units (RTU) are designed to meet your needs in transmission and distribution automation, enabling you to have the most efficient solution for your requirements. As with many of ABB’s products - our RTUs have been designed from the ground up with strong and resilient cyber security enabling you to communicate securely via all forms of networks - offering peace-of-mind and confidence in your network. Functional and hardware extensions can be realized easily and the complete series can be quickly engineered to your needs using our proven software tool enabling greater flexibility and cost savings in training.