

LOW VOLTAGE SYSTEM DEVICES

ABB Ekip UP

Leveraging our digital innovations



The innovative digital unit upgrades low-voltage systems to the next generation of plants.

ABB is making the digitization of power more accessible and user-friendly by developing a range of smart devices that turn systems data into productivity gains. Ekip UP is an industry-first innovation that lets customers keep their existing power hardware – digitizing it with a simple software-driven plug-in upgrade.

ABB’s Ekip UP is a pain-free, cost-effective way to monitor power consumption and optimize operations, maximizing uptime for core processes. The multi-purpose devices enables the installed base to leverage the latest digital innovations, with minimum impact on the switchgear and maximum uptime. Ekip UP digital device can:

- **UP-date** existing facilities with the latest digital innovations - suitable with all switching devices, it covers 100 percent of market opportunities.
- **UP-grade** the efficiency of the installed base with a cost-effective solution.
- **UP-load** software functions of the “all-in-one” ecosystem - enabling microgrid control capabilities and an and the communication to the Ability cloud-based monitoring platform in less than 10 minutes.
- Maximize **UP-time** thanks to easy installation - saving up to 50 percent of time needed for electronic retrofitting, with reduced impact on switchboard design and downtime.

Ekip UP monitors resources, ensuring protections are in place and providing fast fault diagnosis.

Ekip UP also provides continuous control and management of resources. To meet market demands and individual customer requirements, Ekip UP is available in five different versions:

- **Ekip UP Monitor** measures current, voltage, power and power quality values as well as logging and analyzing faults. Advanced communication capabilities make integration with supervision systems ready and enable the switchgear to connect with a cloud-based energy management platform, ABB Ability Electrical Distribution Control System.
- **Ekip UP Protect** adds all the necessary protection functions for power feeders, while **Protect+** also provides generator protections, as well as adaptive and directional protections for power distribution grids. Embedded I/O contacts make interfacing with other switching devices simple.

Both versions can be upgraded with ABB’s “all-in-one” microgrid software, with easy-to-use functions such as automatic transfer switching and load shedding that improve service continuity and energy efficiency.

- **Ekip UP Control** adds a cost-saving power management algorithm to the monitoring functions. By implementing intelligent rules to manage the plant's power consumption, customers can minimize higher energy tariff charges and apply for demand response programs.
- **Ekip UP Control+** is the most powerful, offering the full range of functions and working as a comprehensive microgrid controller.

The user-friendly **Ekip Connect** commissioning tool makes configuring the unit simple – even advanced features require only basic programming skills. The intuitive color touchscreen interface, which supports 10 languages, lets the customer browse settings, check alerts and set parameters quickly and easily.

Applications

Ekip UP is a single unit ready for a spread range of low-voltage market applications from 40kW to 4MW. Having the capability to be both DIN-rail or door

mounted, it satisfies every installation need. IEC 60255 certification makes it suitable globally as this standard is usually recalled by other local regulatory organization, for example IEEE.

Ekip UP monitors the energy of existing commercial buildings, like old hotel, shopping malls, campuses or office facilities. The versatile unit protects industrial plant distribution and generation with the direct interface to switching devices.

For example, sending tripping command to switch disconnectors is a typical case for oil & gas switchboards, where Ekip UP adds pre-programmed transfer switching logics without needed of other PLCs (programmable logics controller).

Ekip UP controls urban or remote microgrid communities, coordinating the different resources from solar inverters to diesel generation. It maximizes the continuous operation of datacenters or hospitals, where it can leverage its plug-in current sensors guaranteeing load power supply even during the installation.

