

Smart Telecontrol Unit TCG

for Telecontrol Gateway Applications



Compact DIN rail device for telecontrol applications

The Smart Telecontrol Unit TCG (STU TCG) with its telecontrol gateway functionality extends the 19 inch Telecontrol Gateway product family by a compact DIN rail device. Within the PSicontrol system it is used for the process interfacing of remote terminal units to the control center.

Process Interfacing

The STU TCG provides two interfaces with electrical isolation for telecontrol lines. It takes over the line controlling, data preprocessing of telecontrol telegrams, and protocol conversion for transmission via IP networks. The STU TCG supports multiple standardized and proprietary telecontrol proto-

cols. Redundant connections to the control system are possible via LAN or build-in UMTS/GPRS modem. In addition, external modems allow connections via xDSL or Powerline.

System Hardening

The STU TCG complies to the IEC 61850-3 requirements for substation operation. It has two DC power inputs for a reliable power supply. The hardening of the core system and the deactivation of unused interfaces and services comply to the BDEW and NERC CIP security demands for energy management systems.

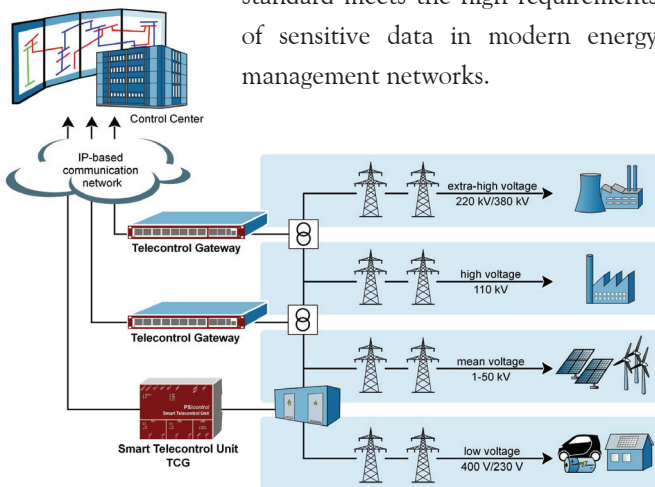
Comprehensive security concept based on international standards

Central User Management

Beside the local user management the STU TCG offers two solutions for a secure and easy central user management: RADIUS and LDAP.

Secure Data Transmission

The encrypted transmission of all data via VPN tunnels according to IPSec standard meets the high requirements of sensitive data in modern energy management networks.



Configuration

For the configuration of the STU TCG a command line interface (CLI) and a comfortable web interface are provided. The complete configuration can be edited in a text file and re-loaded to the devices.

System Details

Interfaces

- 2 telecontrol lines (V.24, X.21)
- 2 LAN
- 1 RS-232
- 2 USB host
- 1 GPS module
- 1 LTE/UMTS/GPRS module*
- 1 WiFi module*

* (option)

Protocols

- Telecontrol protocols: IEC 61850, DNP3, IEC 60870-5-101/-104
- Proprietary telecontrol protocols
- Time synchronization protocols: NTP, GPS, PTP, IEEE 1588

Software

- Embedded Linux Distribution “NENUX”
- Telecontrol Gateway software 5.0 or higher

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