

# GP-0 FOR uREG



## DUAL MODEM GPRS COMMUNICATIONS MODULE FOR uREG PROTECTION RELAY

### Selected technical specifications:

#### - mounting options:

- add-to module for uREG slot (internally powered) ;
- stand alone casing, 12VDC;

- easy access to SIM sockets operating in push-push mode;
- 2x RS-485 full duplex isolated communications ports (option RS-232), USB;
- SMA coaxial connectors for RF antennas;
- 3 indicating LEDs per channel (1 -Tx, 2 - programmable);
- full SIM support: telemetric, prepaid, etc.;
- virus proof operation (FLASH memory driven RTOS and firmware);
- support for two independent APNs;
- Monitor3 configurable settings;
- many operating modes, high reliability, interference proof;
- free firmware upgrade.

### GP-0 advantages:

#### - variety of services and information;

- integrated data bus concentrator for one or many uREG devices (max. 8);
- built-in RS-485 protocols: IEC 60870-5-101, DNP 3.0, MODBUS;
- built-in GPRS protocols: IEC 60870-5-104, DNP 3.0, MODBUS;
- SMS notifications (max. 8 recipients, max. 64 defined events, also from other devices);
- packets routing ability by proxy servers (eg. for prepaid SIM);
- data passing onto external servers due to internal HTTP client functionality;
- auxiliary services like alarm warnings, password checking, access violation etc.,

#### - SSL transfer;

- cyclic transfer of selected measurements (from uREG, SCADA);
- access to data collected on server via WEB browser;
- remote turbine control via WEB browser (protocol with authorization).

#### - costs optimization:

no need to use other external devices like power supplies;

#### - guaranteed reliability and certainty of operation:

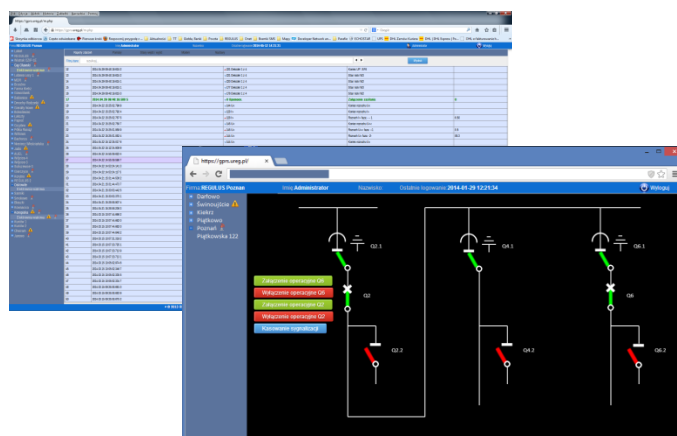
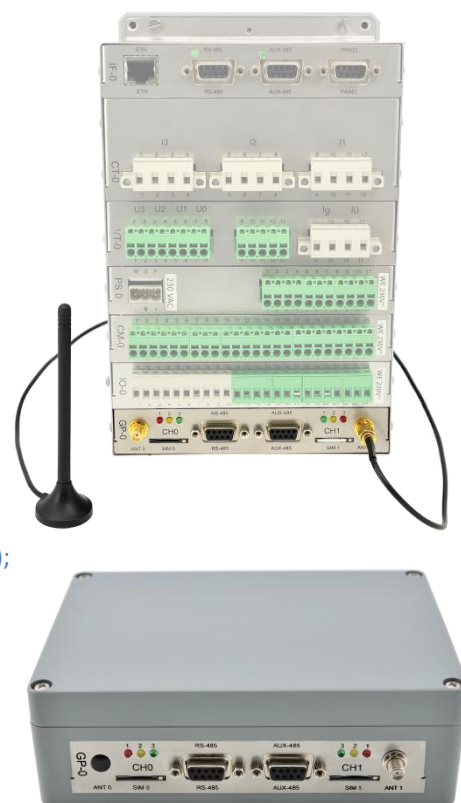
no needs to correlate functionalities and protocols of devices of different vendors;  
automatic restore of lost GSM link.

### Application:

- wind turbines, bio-gasworks, photo-voltaic plants;
- hydroelectric power stations;
- small power stations, industry;
- protocol converters.

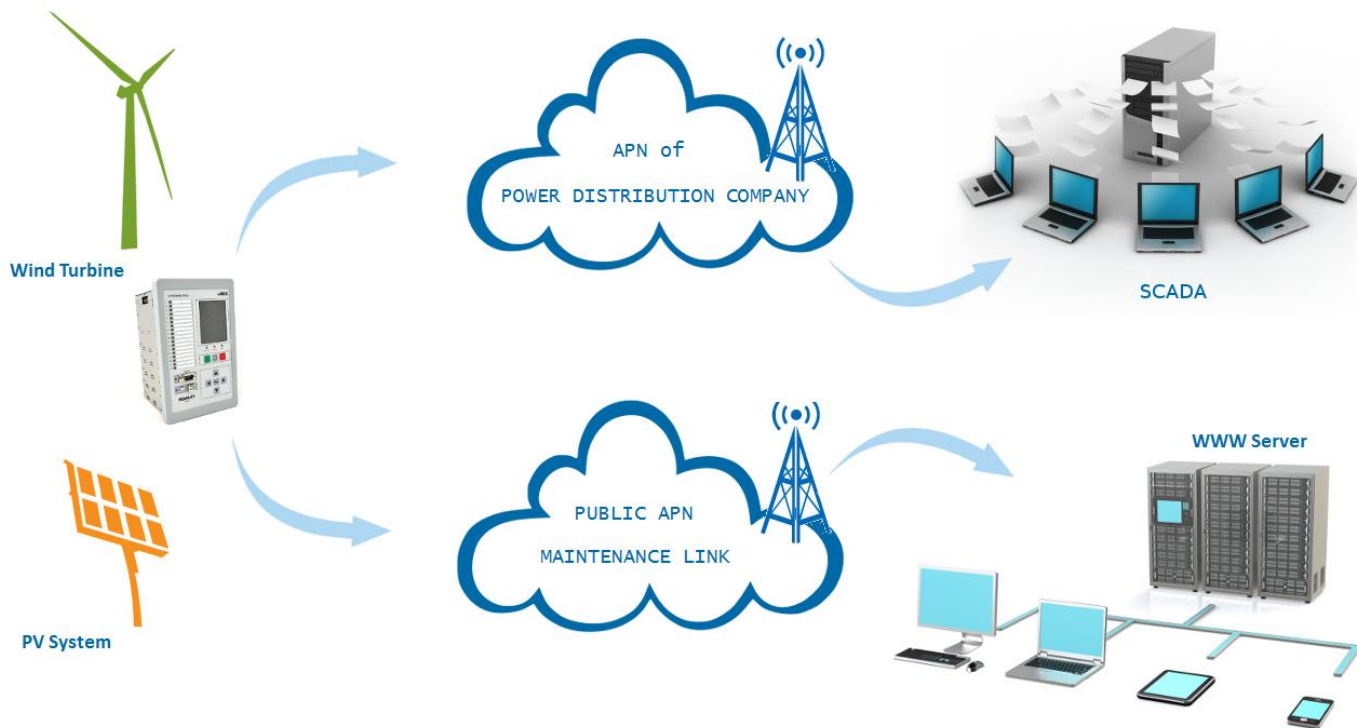
### Available versions:

- GP-0/1 – single SIM internal module;
- GP-0/2 – dual SIM internal module;
- GP-0/1z/2z – stand alone device with aux 12VDC power supply.

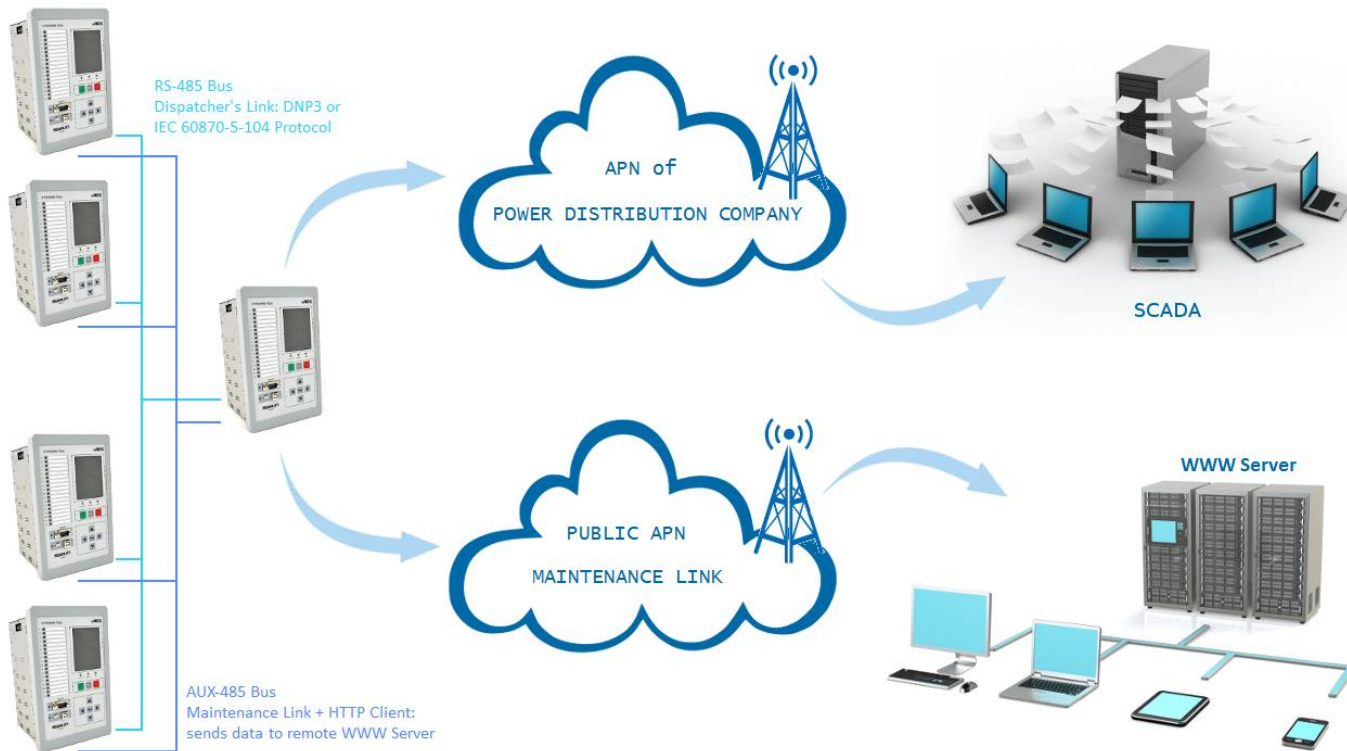


▪ Example operating modes:

**Variant 1 -** data transfer to/from single uREG relay and APN of power distribution company SCADA;  
data transfer onto remote WWW server + maintenance link (Public or Private APN)



**Variant 2 -** data transfer to/from number of uREG relays (connected on common data bus) and APN of power distribution company SCADA;  
data transfer onto remote WWW server + maintenance link (Public or Private APN)



\*APN (Access Point Name).

\*GPRS (General Packet Radio Service).