













6000 V SURGE PROTECTED







CUSTOMIZED SUPERIOR SOLUTIONS FOR SMART ELECTRICITY METERS

- Contains an SMPS power source with i mpact resistance against 6000V mains power. Has fuse protection and harmonics filter within the power input. Due to having SMPS, it can easily run on both AC and DC grids. 9-36VDC Power Option is available.
- Meets all articles of Turkey Energy Corparation (EPDK) AMR Systems specifications both with hardware and software.
- Supports IEC62056-21 communication modes A/C and D. Baud switching support for Mode C is also presented. Moreover, DLMS/COSEM protocol support lies within the modem. Provides MODBUS / RTU protocol support for Network Analyzers and Energy Quality Loggers.
- Equipped with two RS485 and one RS232 communication hardware. Thus it enables reading of more meters with a sole modem.
- Modem firmware updates can be performed remotely manually or automatically. In places where GPRS is not available, the modem can be controlled via SMS.
- Any configuration changes can be performed by using TROLL Software. If needed, modem can be restarted remotely or can be totallt turned off for usage.
- With its AES 128 /256 bit encryption support, it provides a communication safety in its data transmission traffic between AMR system. The encryption system has a 1/10M possibility, and can be deactivated.
- Modem has 2 input ports that can withstand 3500V isolation value. These ports are compatible with standard 9-60VAC/DC input support.
- There are 2 pieces 5A Relay outputs on the modem
- With the sealable terminal cover, unwanted accesses can be prevented.
- By the definition of whitelist and forbidden list, IP restriction is available and there is no number limitation about number of white or forbidden IP addresses.
- The modem provides continuous information flow to users by using SMS management. Modem can also monitor all process and record all wrong cases for period of 2 years. These recorded data can be reached and monitored remotely by users.
- With the Super Capacitor option you can follow energy interruptions and re-energizations.
- Transparent and Smart Mode support to work with many software protocols
- Push / Pull Mode Operation Capability
- Communication with Electricity & Water & Natural Gas & Wastewater Meters & Other Energy Quality Devices





- Available 9 different colours leds on modem. Monitoring signal level, power status ,communication status and error by using leds.
- Thanks to advanced logging feature, Status, Running Logs and Error Logs can be accessed remotely and closely up to past 2 years.
- By using technology of modem updating remotely or closely, being always up to date.
- Be informed about any changes in input and output ports by using improved SMS management.
- Being compatible with Turkish Electric Corparation AMR Specs. Additionally working with super capacitor.
- Works and communicates with meters in accordance with IEC 62056-21 by using Auto Baud Switch.
- Self-reset during the loss of communication by using configurable reset time.
- RS-485 2 wires port for surge voltage protection (15KV)
- Implementation with 35 mm DIN RAIL or screw connection.





TECHNICAL SPECS

FEEDING VOLTAGE 85-265 VAC (9-36VDC OPTIONAL) **INSTANT CURRENT** 250 mA **MAX CURRENT** 2 Amp. NOMINAL RUNNING FREQUENCY. 50 / 60 Hz **GPRS BAND** Quad Band (850/900/1800/1900 Mhz) **GPRS CLASS** Multislot - Class 12 **RUNNING MODES** TCP Server / Client POWER INPUT IMPACT RESISTANCE 6000V COMMUNICATION INPUT INSULATION 15KV **CONTROL INPUT INSULATION** 3500V **ETHERNET** INTERNAL MEMORY 1-10 Mbyte 105x35x60 mm(Length x Width x Depth excluding terminal cover) DIMENSIONS INPUT PORTS 2 Optical Isolation Inputs OUTPUTS 2 250V/5A Relay Outputs 300 - 115.200 Baud 7E1 / 8N1 / Transparent Communication IEC 62056-21 ModA/ModC/ModD COMMUNICATION PROTOCOL SUPPORTS DLMS/COSEM MOD-BUS RTU **INDUSTRIAL COMMUNICATION PORTS** 2 RS485 Ports, 1 RS232 Port (optional) 300-115.200 Baud PC COMMUNICATION PORTS USB 2.0 / 12 Mbit / USB Mini Running Temp. : -30 C +70 C (-40 C..... +80 C Optional) Storage Temp. : -40 C +80 C TEMPERATURE RANGE Humidity : 0 - 96 % IP 54 / Material ABS + PC PROTECTION CLASS 250 Gr. WEIGHT Configuring by Close Connection with USB 2.0 and TROLL, CONFIG SOFTWARE / METHOD Configuring by remote Connection with TCP /IP ve TROLL Updating with USB 2.0 & Remote Connection with TCP /IP FIRMWARE UPDATE 35 mm DIN RAIL or Screw Connection **MOUNTING TYPE**



