

MV Beacon

SMS alarm sending modem designed for line fault indication



Features

- 4 digital inputs
- Power source lost event (AC power version)
- Input status inversion option
- Password protected
- Programming over USB console
- Base station information
- Mobile operator information
- Watchdog possibility
- GSM signal strength and Battery level in every message
- Human friendly programming and readable SMS messages
- Firmware update over USB: drag and drop file without additional software



Concept

Middle voltage Beacon is SMS alarm sending device for secondary substations and fault indicators.

Device is simple to install and use specially for distribution network operators (DNO). This device was created to monitor overhead lines, cable lines fault indicators and secondary sub-station equipment conditions.

MV Beacon is energy efficient device providing long term operation up to 8 years.

MV Beacon can be integrated together with WCC200 as SMS gateway to IEC protocols (IEC 60870-5-101, IEC 60870-5-103, IEC 60870-5-104, SNMP, Modbus RTU/ASCII, Modbus TCP). With WCC200 gateway customer can easily integrate up to 256 MV Beacons to SCADA system with DNO mostly used protocols.

Operation

As soon as the fault indicator senses a fault, MV Beacon sends a SMS to your mobile phone, WCC200 or to any third-party SCADA system. When the fault alarm is sent, the GSM unit is switched off and the MV Beacon enters ultra-low power consumption mode.

Specific Pooling and Stand-by intervals can be selected. Heartbeat messages includes: id, input status, battery level, QSM level, date, time information.

Specifications:

System

| | |
|-------------------|---|
| Modem | U-blox Sara G350, Swiss made 2,5G GSM/GPRS module |
| Freq. Bands | Quadband 850/900/1800/1900 MHz |
| Digital Inputs | 4 DI |
| PC USB connection | Mini USB |

Software

| | |
|-----------------------------|--------------------|
| Configuration | Over USB or SMS |
| Firmware upgrade | Drag and drop file |
| SMS notification recipients | Up to 3 numbers |

Mechanical

| | |
|-------------------|--|
| Temperature range | -35..+75° C |
| Humidity | ≤ 80% |
| Body material | B+ Version: ABS, grey A version: Steel, grey |
| Dimensions | 187x122x90mm |
| Protection | B+ version: IP65 A version: IP66 |
| Warranty | 2 years |

Electrical characteristics

| | MV Beacon A | MV Beacon B+ |
|-------------------|--|--|
| Power supply | 230VAC and 2,6Ah Lithium Ion accumulator | 3.6V, 22 Ah Lithium Thionyl Chloride battery |
| Max. energy usage | 130mA | 130mA |
| Battery lifetime | Up to 36h | up to 8 years |
| Cable length | - | up to 5 m |
| Connector | Screw terminal block | Screw terminal block +4 pole connector |
| Antenna | Internal or external | Internal |
| Grounding | Protective earth | Protective earth |

MV Beacon supports:

- Northtroll Linetroll 111k
- Northtroll Cabletroll 2700

