

MV Beacon

SMS alarm sending device designed for line fault indication



Features

- 4 digital inputs
- Power loss event (AC power version)
- Input status inversion option
- Password protected
- Configuration over USB console
- Base station information
- Mobile operator information
- Internal Watchdog
- IP65 class enclosure
- GSM signal strength and battery level in every message
- Readable SMS messages
- Drag and Drop firmware update over USB mass storage
- Option for firmware update over GPRS network
- Configurable input filters; pulse sensing from 20ms
- Optionally captured short (transient) and long (permanent) input signals
- Automatic time calibration



Concept

MV (middle voltage) Beacon is an SMS alarm sending device designed for secondary substations and fault indicators.

MV Beacon is simple to install and use for distribution network operators (DNO). The device has been created to monitor overhead lines, cable line fault indicators, and secondary substation equipment conditions.

MV Beacon is an 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 you can easily integrate up to 256 **MV Beacons** to a SCADA system with DNO mostly used protocols.

Operation

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

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

Specifications:

System

Modem	U-blox Sara G350, Swiss made 2,5G GSM/GPRS module	
Frequency bands	Quadband 850/900/1800/1900 MHz	
Digital inputs	4	
PC USB connection	Mini USB	
Input connectors	MV Beacon A: Screw terminal block	MV Beacon B+: Screw terminal block +4 pole connector

Software

Configuration	Over USB console or SMS
Firmware upgrade	Over USB mass storage or GPRS
SMS notification recipients	Up to 3 numbers

Mechanical Characteristics

Operating temperature	MV Beacon A: -30 ÷ +70°C	MV Beacon B+: -40 ÷ +85°C
Humidity	5 - 95%RH (non-condensing)	
Casing	IP65, ABS, grey	
Dimensions	90 (H) x 122 (W) x 187 (L), mm	
Warranty	2 years	

Electrical Characteristics

Power supply	MV Beacon A: 230VAC and 2,6Ah Lithium Ion accumulator	MV Beacon B+: 3.6V, 26Ah Lithium Thionyl Chloride battery
Max. energy usage	130mA	130mA
Battery lifetime	Up to 36h	up to 8 years
Cable length	-	up to 5 m
Antenna	Internal or external	Internal

MV Beacon supports:

- Northtroll Linetroll 111k
- Northtroll Cabletroll 2700



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