



LIMO LV LINE OBSERVATION SYSTEM



LIMO Overhead Line Observation System

LIMO is an electronic device which observes and detects LV overhead line breaks and warns concerned technician about it. LIMO can take care of three-phase, Neutral, illumination line and metallic pole voltage. Apart from observing the line breaks, the LIMO system can also measure line voltages of the farthest line with its line unit.

Central Unit

On MV/LV transformer, the main feeder is connected to the connection point as three-phase and neutral. The central unit sends a query to the registered line units on the final metallic poles.

Line Unit

Connected to the three-phase, Neutral and lighting line phase (of street lights illumination network) at the final metallic poles. It answers the queries sent by the central unit.

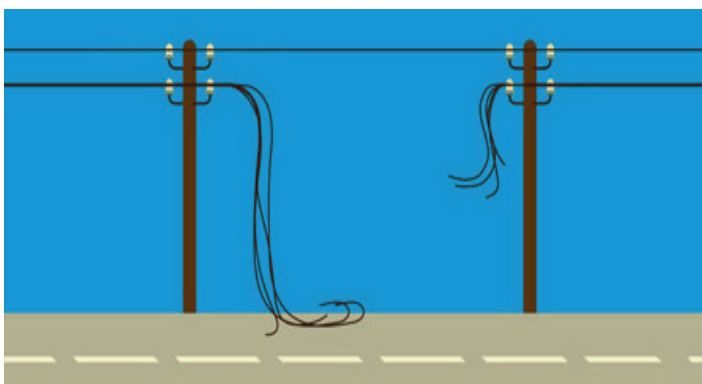
Repeater/ Booster Line Unit

It is designed to connect between two intermediate points of long overhead lines or areas of the lines with high electrical noise. It amplifies the signal from the central unit and transmits it to the line unit.

The system consists of two main units; Central unit and Line unit which are constantly communicating with each other. Besides, depending on the length of the line or the load on the line, the repeater/booster unit can be added to the intermediate points and the monitoring system can serve up to the farthest points.

Working Principle

The queries sent by the central unit are answered by the line units. An unanswered query means there is a broken line. In the case of breaks on the line, the energy of the broken line will be de-energized by the relays (user-defined) on the central unit and sends information to the server. The Server sends transformer and line data of the broken line to the maintenance team via SMS and/or Email. Optionally in case of any Voltage Rise/Voltage Drop/Power Failure etc., information about transformers and illumination meters is transmitted to the server via the central unit.



Line Unit Technical Specifications



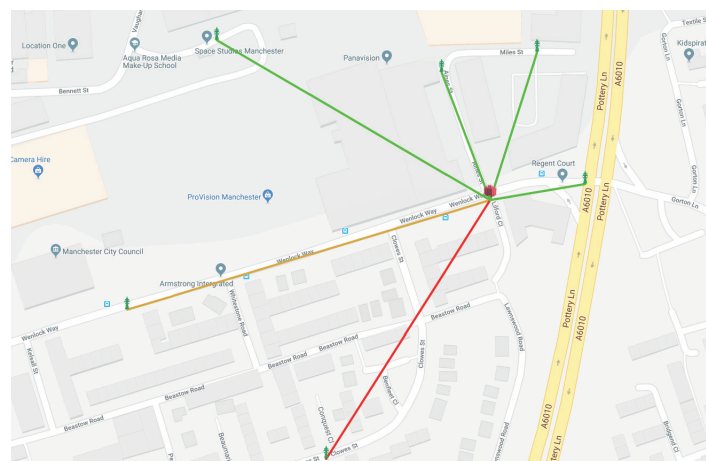
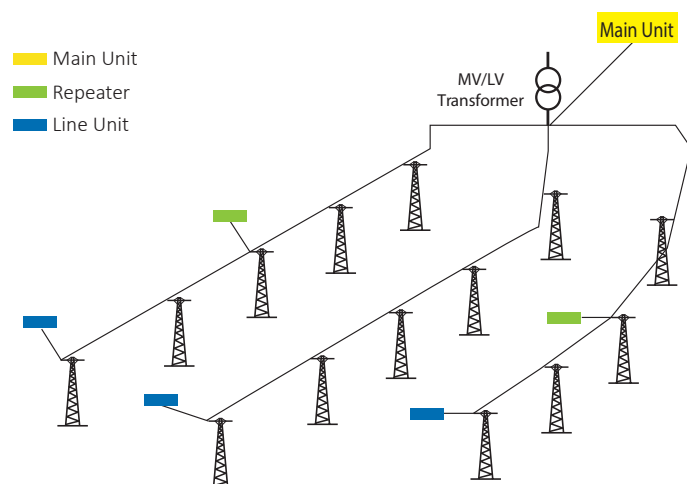
- CENELEC Narrowband Power Line Communication (60kHz to 125 kHz)
- Adjustable PLC Network ID and Node ID
- Three-phase, Neutral and illumination line phase connection at the final metallic pole
- Voltage Control for each phase
- Operating Temperature:-40°C to 70°C
- Built-in Power Supply (57V to 480V AC)
- IP65 Protection Class
- LED Indication



Central Unit Technical Specifications



- CENELEC Narrowband Power Line Communication (60kHz to 125 kHz)
- Adjustable PLC Network ID and Node ID
- Three-phase and Neutral (3P+1N) Connection
- Voltage Control for each phase
- Operating Temperature: -40°C to 70°C
- Built-in Power Supply (57V to 480V AC)
- Test Mode with test button
- Activate/Deactivate the system with buttons
- Quad-Band GSM/GPRS/EDGE
- Works with different GSM Operators
- Supports Dynamic/Static IP
- LED Indicators (Relay Open/Close, Signal Level, RTC, Line Active/Passive)
- RS485 Interface
- Two Relay Output (5A/250V AC)
- External Antenna Connection
- Read of Electric Meter with RS485 (IEC62056-21 Mode C)
- Task Scheduling (Reading, Server Connection, Relay Control, etc.)
- Secured Communication with DES/3DES Encryption
- Remote or Local (RS485) Software Update
- APN Assignment
- Internal Memory (4MB)
- Integration of Different Monitoring Systems with DLL or WEB Service



Limo Software

- Display on Map and Chart
- Adding Unlimited Poles and Transformers
- Adding Photos
- 3-Phase Voltage Monitoring
- Error Detection
- Reading Transformer Meter Info
- Define Different User Type (Administrator etc.)
- Sending Automatic Mail/SMS
- Animated Display of Fault Condition
- Monitoring Error Logs

HighTest Technology Ltd. is a leading manufacturing company based in the UK which produces highly precise test equipment. We mainly focus on the development, manufacture, and marketing of Transformer test systems.

We have several years of experience in the field of developing and producing high-end test equipment. Customer satisfaction is our prime motto. We supply our test equipment worldwide to Transformer manufacturers, Electrical utilities, general contractors and service companies. Our test equipment is designed and produced according to the most widely adopted international standards. As we value our customers the most, our well-experienced team always provide excellent after-sales support and technical assistance.



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