

Medium Voltage Distribution

Feeder Automation

With Schneider Electric's solution, feeder automation gets easy and affordable.

Make the most of your energySM

Schneider
Electric

Power outages are costly

Defective power supply affects...

| ... your revenues and assets... | ... and your customer's satisfaction |
|--|---|
| <ul style="list-style-type: none">- Loss from non-distributed energy- Regulator penalties- Increase of operational costs- Equipment early replacement due to stress | <ul style="list-style-type: none">- Loss of revenues due to non-productive time- Deterioration of electrical installations |

We offer you an easy and affordable solution to preserve your customer's satisfaction and reduce your operational costs.

Reducing outage time

In the event of a fault, 50% of the network supply can be restored within a few minutes.

Improving the quality of distributed energy

Accurate information about permanent and transient faults allows corrective and preventive maintenance to be carried out to reduce fault repeatability.

Reducing operational costs

Accurate fault information considerably reduces fault detection time.

Getting immediate return on investment

Thanks to the Easergy L500 SCADA, focus your investment on network instrumentation: Easergy L500 is a preconfigured basic SCADA for Easergy devices with just enough functions to manage data, not more.

Remote control of your networks can be achieved in stages using simple systems that can be implemented within a few months. The modularity and integrability of the Easergy products range significantly reduce installation and commissioning costs and, allow you to invest exactly what is required and to benefit from an immediate return on investment. You can then add extra equipment when your budget allows.



The SAIDI (System Average Interruption Duration Index) can vary from a few minutes to several hours. Our feeder automation solution helps you decrease the number and duration of outages, reduce the size of zones affected by the faults and thus optimize your network's reliability of supply.



Because a single failure has the potential to generate considerable financial losses, continuity of service is a strategic challenge.

An outage might cost up to millions of dollars for a semi-conductor production or for a company in the banking sector, and damage credibility and confidence.

Take advantage of our feeder automation solution to...

- improve quality of service
- reduce operational and maintenance costs
- defer capital expenditures

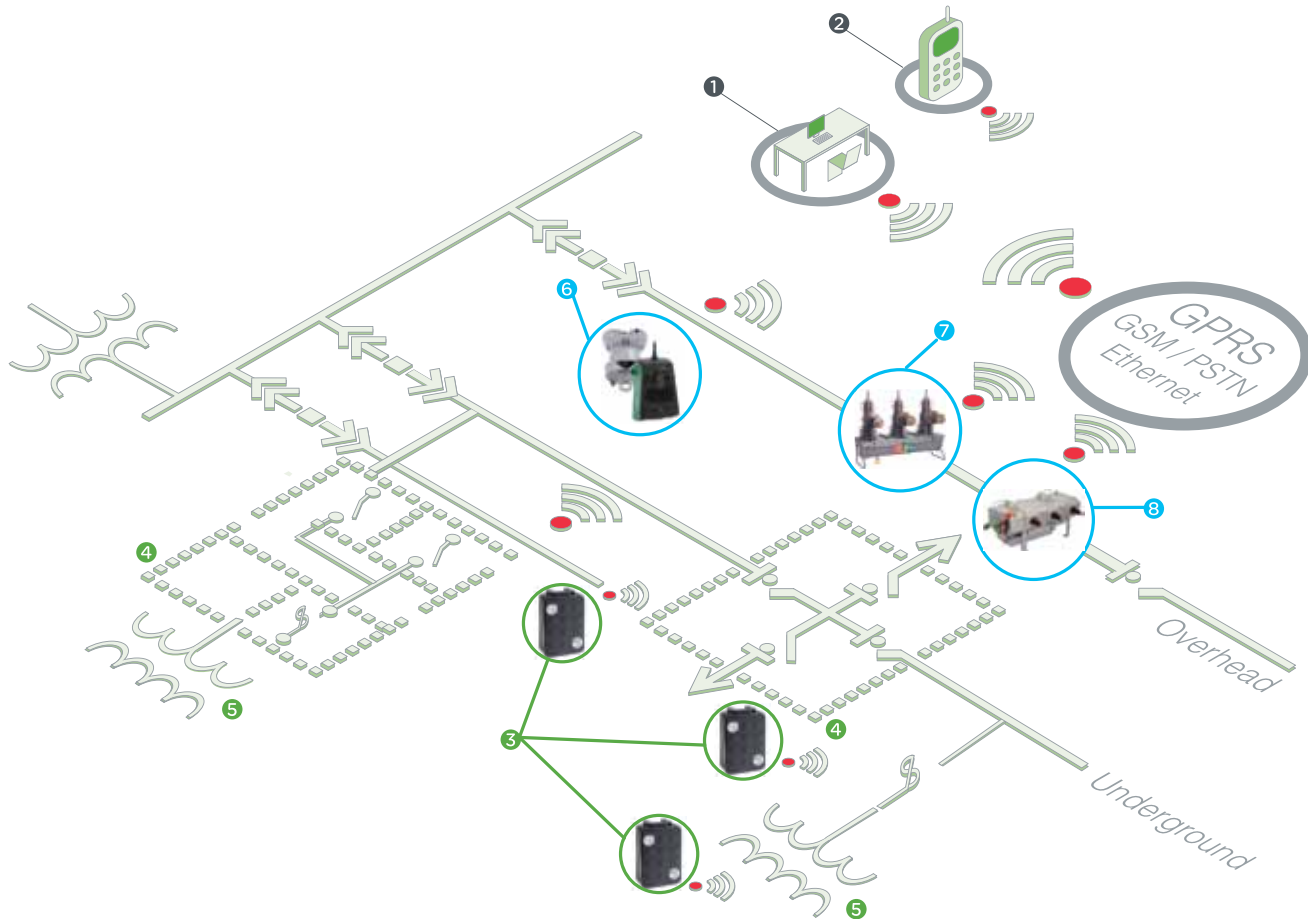
... through

step by step and easy implementation of an affordable and global solution for underground and overhead network management.

... within

the frame of your operational budget.

How does it work?



- 1 Remote control system: Easergy L500
- 2 SMS alert
- 3 Communicating fault passage indicator for underground networks: Easergy Flair 200C
- 4 Medium voltage pad mounted switchgear
- 5 Underground or sub-surface transformer

- 6 Communicating fault passage indicator for overhead networks: Easergy Flite 116-SA/G200
- 7 Recloser: U-series remote controlled by ADVC
- 8 Sectionalizer: RL series load break switch remote controlled by ADVC







"It is the management of energy use through measurement, monitoring and control that effects permanent change. Moreover, compared with the costs (and technical skills necessary to avoid risks) of installing thermal solutions, energy control can be implemented at a relatively modest price and a very rapid payback.

This is especially true when measured against escalating energy prices – most energy control solutions can be amortized very quickly." Extract from Schneider Electric's White Paper "Making permanent savings through active energy efficiency"

Easergy range

Easergy: a range of solutions for MV network management

| Easergy range dedicated supervisor | Remote network monitoring | | Local fault indication |
|---|--|---|--|
|  |  |  |  |
| L500 | Flite 116-SA/G200 | Flair 200C | Flite 110-SA |
| Easergy range dedicated remote control system Capacity: 5000 devices | Communicating fault current detector for overhead lines Single-phase ammetric detector | Communicating fault current detector for an MV substation Three-phase, 2 channel fault current detector open to all types of earthing system | Fault current detectors for an overhead network Single-phase ammetric detector |
| Main functions | | | |
| <ul style="list-style-type: none"> • Network view with substation alarm • Detailed substation view • Alarm logs, archives • Direct access to substation view via a list • Automatic sorting of alarms and archives by substation • Online help | Flite 116-SA: <ul style="list-style-type: none"> • Line installation • Phase-to-phase and phase-to-earth fault current detection • I and V presence measurements • Communication management with G200 • Powered by lithium battery G200: <ul style="list-style-type: none"> • Pole-mounted • Flite 116 concentrator • Processing and logging • Free I/O: 3 digital outputs and 6 digital inputs • 110 VAC, solar, or 12 Vdc supply | <ul style="list-style-type: none"> • Wall-mounted • Phase-to-phase and phase-to-earth fault current detection • V, I, P, Q, S energy and power factor measurements • Management of 3 digital outputs and 6 digital inputs • 220 Vac supply backed-up by Ni-CD battery • Concentration of Modbus communication devices • Data and measurements archives | <ul style="list-style-type: none"> • Line installation • Phase-to-phase and phase-to-earth fault current detection • Indication of transient and permanent faults • Powered by lithium battery |
| Communication | | | |
| <ul style="list-style-type: none"> • Integrated communication front-end • Permanent and nonpermanent communications management: <ul style="list-style-type: none"> – telephone/GSM – radio – direct public and dedicated private line • Periodic call management | <ul style="list-style-type: none"> • 915 MHz short range radio communication • 1 SCADA communication port • Communication interface: radio, GSM, GPRS, CDMA | <ul style="list-style-type: none"> • 1 communication port • GSM, GPRS or RS232 interface • 1 Ethernet port • Transmission interface: PSTN, Radio, GSM, GPRS, Ethernet, RS232, RS485 | — |
| Communication protocol | | | |
| <ul style="list-style-type: none"> • Modbus | <ul style="list-style-type: none"> • IEC 870-5-101 • Serial DNP3 and TCP/IP • Modbus | <ul style="list-style-type: none"> • IEC 870-5-101 • DNP3 • Modbus | — |
| Data configuration | | | |
| <ul style="list-style-type: none"> • Professional communications and database editor • Data creation via dialogue boxes | <ul style="list-style-type: none"> • Local and remote configuration with Easergy L500 | <ul style="list-style-type: none"> • Local or remote configuration • Embedded web server | <ul style="list-style-type: none"> • By micro-switches |
| Accessories | | | |
| <ul style="list-style-type: none"> • Radio, PSTN, DL and fibre optic modems | <ul style="list-style-type: none"> • Installation tool | <ul style="list-style-type: none"> • Open phase and zero sequence sensors | <ul style="list-style-type: none"> • Installation tool |

For further information on how to manage your overhead and underground MV networks, please contact your Schneider Electric representative about additional products for medium voltage overhead distribution and fault protection, location and analysis.

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