

LDE 800

Long distance extension for all applications where normal reflection measurements fail



- Range extension for reflectometers
- The high impulse voltage minimises the limitations of distance, resistance and attenuation on reflection measurements
- Distance-dependent amplitude correction compensates for cable attenuation of any type
- Adjustable filtering eliminates most interfering effects and distortions
- External compensation provides the best compensation possible

DESCRIPTION

The LDE 800 functions as an add on to reflectometers for measurements on cables with extreme physical conditions including excessive lengths, high attenuation and resistance, very low or high impedance and other difficult-to-overcome values. Such cables include:

- Long sub-sea cables (power or umbilical)
- Overhead lines
- Heating cables and district heating monitoring
- High attenuation cables
- Large cross section cables

The technology

Instead of using the internal impulse generator of the reflectometer (TDR) the LDE 800 has its own powerful measuring pulses which are measured by the reflectometer in the passive transient mode.

The typical output voltage is 800 V at 50 Ohms impedance. The unit consists of 4 main modules that can be adapted to different requirements:

- The module with impedance matching and adjustment to provide the adaptation to cable parameters from 3 to 400 Ohms.
- The filter module with adjustable high and low pass filter circuits compensates for inductive effects and external influences, especially on long cables.
- The impulse generator for output pulses that vary by cable impedance from 100 to 2200 Volts and pulse widths of up to 10 ms.
- The amplifier module with adjustable gain and distance pending amplitude correction.

To simplify its use, the system has a basic default setting for all parameters. Tuning these defaults will then guide the user to the best results.

TECHNICAL DATA*

LDE 800

Pulse amplitude @ 50 Ω	100 ... 800 V in Steps
Pulse width	0,5 ... 10 μs in Steps
Filter	0 ... 12 kV or 0 ... 4 kV
High pass	$f_{LL} = 6 \dots 587$ kHz in Steps
Low pass	$f_{UL} = 16 \dots 15.500$ kHz in Steps
Adaptation	240 V / 4 Ω, 800 V / 50 Ω, 2.000 V / 400 Ω
Low	33 / 22 / 15 / 10 / 6 / 3 Ω
High	50 / 75 / 100 / 175 / 250 / 400 Ω
Supply	230 V / 50 Hz; others on request
Dimensions (W x H x D)	483 x 295 x 200 mm (19", 6 HU)
Weight	13 kg

SCOPE OF DELIVERY

- LDE 800 unit
- Set of cables
- Accessory bag

OPTION

- Discharge transformer (for residual charges and termination of open ends)

ORDERING INFORMATION

Product	Order no.
LDE 800	899005565
Option:	
Discharge transformer	

* We reserve the right to make technical changes.

