



Digiflex Com

Digital reflectometer with highest precision and resolution

Benefits:

- ▶ **Measuring range from 5 m up to 30 km**
- ▶ **Line comparison with 2 measuring inputs**
- ▶ **High resolution in the near and far range**
- ▶ **Weatherproof case**
- ▶ **Solid housing for rugged field use**

Description

Digiflex Com is a compact, efficient reflectometer for detecting faults and measuring lengths of metallic telecommunications and power cables. Many helpful functions permit precise measuring results even in the near range <5 m and for live low voltage cables. These include e.g. resolution of 2.5 cm and a terminating set for near-range measurements, distance-dependent compensation of cable attenuation for measurements up to 30 km and voltage-resistant measuring inputs up to 250V. The clearly structured LCD display permanently shows all settings, thus eliminating any confusing menu structures. Both inexperienced users and experts quickly find the right settings and the required results.

A reflectometer like the Digiflex Com transmits short electrical pulses of just a few volts and a pulsewidth of nano to micro seconds between two connected metallic conductors. Each change in impedance causes partial reflection of the pulse back to the device. The reflectometer calculates the distance using the time between transmitted pulse and reflection: the distance appears as a trace on the display. This can be used to identify cable ends, short circuits, interrupts, joints and cross-talk; distances can be read off easily.

Features

- ▶ High local resolution of 2.5 m in the 50 m range
- ▶ Easy to use with menu control and help functions
- ▶ Adjustable distance depending amplitude correction (de-attenuation)
- ▶ Clear presentation of reflectograms with split screen to show zoom and full view at the same time
- ▶ Large illuminated LC display
- ▶ Two measuring inputs for wire comparisons and coupling measurement
- ▶ Single measurement, constant measurement, averaging, visualization of intermittent fault location IFL
- ▶ Voltage protected measuring inputs up to 250V for detecting faults in live low voltage cables
- ▶ Internal memory for 50 reflectograms
- ▶ Serial port for printer and PC
- ▶ Reflectograms can be transferred back from the PC to the Digiflex memory together with the Winkis database software
- ▶ Robust, splashproof housing for use in rough field conditions



Technical data

Measuring ranges	50 m to 30,000 m (zoomed 5m)
Measurement types	Direct measurement with internal replication; IFL mode (intermittent fault location); comparison measurement of two pairs; differential measurement of two pairs; coupling measurement; permutation; water ingress with optional fault converter
Pulse widths	5; 10; 20; 50; 200; 750; 3000 ns
Distances	m; ft; μ s
Max. resolution	2.5 cm
Accuracy	+/- 0.1 % of the measuring range +/- current resolution
V/2 setting	30 - 150 m/ μ s 98 - 492 f/ μ s
NVP factor	0.200 - 0.9999
Dynamic	90 dB
Display	256 x 128 pixels
Pulse amplitude	10 V at 130 Ohm
Internal replication	40 - 200 Ohm
Power supply	NiMH rechargeable battery External: 230 VAC 11 - 15 VDC
Operating temperature	-10 °C ... +50 °C
Storage temperature	-20 °C ... +60 °C
Housing	Plastic, IP 55 as per DIN 40 050
Dimensions (WxHxD)	260 x 176 x 70 mm
Weight	1.5 kg

Scope of delivery

- ▶ Device with battery 7.2V / 1.7 Ah NiMH
- ▶ Transport bag for device and accessories
- ▶ Set of cables with 2 measuring leads
- ▶ Battery charger
- ▶ User manual

Accessories

- ▶ Plug-in power pack
- ▶ Fault converter (for locating moisture faults)
- ▶ Cable replica KNB001 as adjustable measurement reference
- ▶ Rechargeable battery
- ▶ Supplied with factory calibration certificate