

Surgeflex 8

Mobile cable fault location system



- Testing and fault location system up to 8 kV
- Different fault location methods available
- Portable, lightweight and cost-effective

DESCRIPTION

The Surgeflex 8 is a mobile and economical fault location system, perfect for low/medium voltage cables, control cables and deep-well-pump cables.

The powerful ARM[®] (Arc Reflection Method) is used to pre-locate high resistance faults. If necessary, fault conditioning is possible through short-term burning at all voltage levels. Low resistance faults can be located with the Teleflex SX or T3060 alone, without having to use high voltage methods.

The Teleflex SX offers convenient operator support with on-line help and one-button-operation. In ARM[®]-Mode, the set automatically shows the cable end and the fault location. Even inexperienced users can easily locate faults with the "Step-by Step Easy Mode", where the operator is guided through the fault locating process.

1000 Joules of surge energy provide the necessary power to accurately pinpoint cable faults using the acoustic method.

The unit's big wheels make it suitable for field operation. The modular setup promotes the flexible configuration of the Surgeflex 8 to fit individual needs.

TECHNICAL DATA

Surge Unit 2/4/8 kV

Testing	0 ... 8 kV
Surge	0 ... 2 kV; 1000 J 0 ... 4 kV; 1000 J 0 ... 8 kV; 1000 J
Surge rate	2 ... 6 s
Burning	single pulse up to 1.4 A
Connecting Cable	6 m (standard)
Mains supply	230 V; 50 / 60 Hz, 2,3 kVA (110 V optional)
Dimensions (W x H x D)	530 x 1390 x 660 mm
Weight	app. 65 kg



Teleflex T 3060

Display	5.7" high-contrast TFT color display, 640 x 480 pixels, with LED backlight
Methods	Automatic measurement and fault location
Features	Display of fault type (open or short), cable end and fault distance
Optional	Transformers or joint box recognition
Inputs	Single input
Application	Reflection measurement, ARM, ICE, Decay
Distance measurement	Cursor, Marker, Shift (ICE and Decay)
Sampling rate	100 M/Hz
Pulse width	50, 100, 200, 500 ns and 1, 2, 5, 10 μ s
Range	8 km, 64 km (for ICE and Decay only)
Pulse amplitude	35 V
$v/2$	10 ... 150 m/ μ s or ft/ μ s or NVP
Y amplification	Attenuation 0 ... 64 dB
Zoom	Combined full zoom range
Accuracy	0.1 %
Resolution	0.8 m (at 80 m/ μ s)
Memory space	> 1000
Power supply	110 V ... 240 V $\pm$ 15 %, 50 / 60 Hz, 50 VA
Battery	Integrated LiFePo4 battery (12 V/3 Ah)
Operation time	> 2 hours on battery
Operating temperature	-20 °C to +50 °C
Storage temperature	-25 °C to +70 °C
Dimensions (W x H x D)	270 x 245 x 125 mm
Weight	6 kg
Protection class	IP 54 (in accordance with IEC 61140)



Teleflex SX

Distance range	20 m – 160 km at $v/2 = 80$ m/ μ s
Pulse width	20 ns – 10 μ s
Pulse amplitude	10 – 50 V
Resolution	0.1 m at $v/2 = 80$ m/ μ s, 1.0 cm at $v/2 < 40$ m/ μ s
Sampling rate	Up to 4.00 M Hz (real sampling rate)
Amplification	-37 – +37 dB
De-attenuation	0 – +22 dB for ProRange (adjustable from 0 to 100%)
Transit time setting $v/2$	10 – 145.9 m/ μ s, ft/ μ s or nvp
Dynamic response range	> 80 dB
Output impedance	50 Ω
Adjustment	8! – 500 μ s, adjustable
ARM trigger	Automatic adjustment with ΔU trigger
Blind spot	No
Withstand voltage	< 400 V, operation only with separation filter
Display	10.4" colour TFT XGA 1,024 x 768, capacitive touchscreen, 600 cd/m ² , LED backlight, dimmable
Memory	4 GB mSATA for program and data
Connections	Ethernet, USB, BNC, CAN (CAN optional)
Protection class	IP 65 enclosed, IP 54 open
Supply	Battery operation, 110 – 240 V, 50/60 Hz, 30 VA, 10 V – 17 V DC, 3.8 A
Dimensions (W x H x D)	362 x 195 x 195 mm (option 19" plug-in, 6 HE)
Weight	10 kg
Operating temperature	-10 °C to +50 °C
Storage temperature	-20 °C to +60 °C

FEATURES

- DC-testing up to 8 kV
- Pre-locating
- Reflection measurement
- ARM®-measurement (Arc Reflection Method) up to 8 kV
- Impulse Current Method 2 / 4 / 8 kV
- Burning (fault conditioning) up to 8 kV
- Pin-pointing
- Distance and acoustic measurement (2 / 4 / 8 kV at 1000 J)
- Sheath fault locating

SCOPE OF DELIVERY

- Surge Unit 2/4/8 kV
- ARM® Unit 8 kV
- Teleflex T3060 or Teleflex SX
- Mounting frame on wheels
- Operating manual
- Set of connecting cables

OPTIONS

- Surge wave receiver digiPHONE+
- Earth fault locator ESG iNT

ORDERING INFORMATION

Product	Order no.
Surge Unit 2-4-8 kV, 1000 J	820008025
Surge generator 2-4-8 kV, 1000 J	
Set of cables	
Line terminal 0406	
Terminal 0406	
Accessory bag 0890	
High voltage connection lead 4.0 m for SU 2-4-8	
Surgeflex 8-1000	SFX8-1000-P-50-N
Surge Unit 2/4/8 kV, 1000 J	
Teleflex T3060	
Set of cables	
Trolley	
ARM unit 8 kV	
Surgeflex 8-1000	SFX8-1000-P-SX-N
Teleflex SX	
Set of cables	
Trolley	
ARM unit 8 kV	
External safety equipment (Req. Acc. to. BGI 891 and DIN EN 50191/VDE 0104)	128309600