



Features

- ✓ Rated energy output of 750 Joules at each selectable range
- ✓ Pre-location of cable faults distance with integrated TDR, ICM & ARM Methods
- ✓ Automatic cursor at fault point
- ✓ Standard and advanced mode
- ✓ DC Hi-pot, Burn test & SFL up to 12 kV
- ✓ GPS based Cable Route Mapping. (Requires cable route tracer)
- ✓ Cyclical pulse repetition for precise pin-pointing of cable faults in Acoustic Method
- ✓ 10" LCD touchscreen colour display
- ✓ Maximum measuring range of 100 km
- ✓ Safety interlocks with Emergency OFF for fully protected operation
- ✓ Automatic discharging facility of cable under test
- ✓ In case of input power failure, system will operate through battery system
- ✓ Screen Mirroring for remote support of pre-location of faults (optional)

COMPAC 12

Cable Fault Locating System

COMPAC 12 is a compact and rugged system designed for quick and accurate cable fault detection in power cables. Ideal for utilities, industrial plants, and service providers, it combines advanced diagnostic tools for fault pre-location and stabilization in one integrated unit. With up to 12kV voltage capability and 750J energy delivery, COMPAC 12 delivers precision and ease of use, supported by essential safety features like output cable interlock, emergency OFF, and automatic discharge.

■ Pre-location Modes:

- **TDR:** Sends a fast-rise pulse, reflects from impedance change, and auto-computes fault distance using set VOP
- **ICM:** Uses current coupler to capture and analyze transient waves generated by a breakdown or flashover at fault point
- **ARM:** Uses an arc reflection filter to lower fault resistance for accurate pre-location

■ **DC Hi-Pot Test:** Checks cable insulation integrity and locates faults using up to 12 kV test voltage and up to 20mA current, with overcurrent trip protection

■ **Sheath Fault Location:** Identifies the sheath fault in underground power cables by applying high voltage up to 12kV DC with a test current of 50mA

■ **Burn/Proof Test:** Uses 12kV DC voltage and up to 50mA current to stabilize unstable cable faults for faster pre-location

Applications

The COMPAC 12 is ideal for testing, fault location, and diagnostics of underground power cables in diverse electrical networks. It is designed to support maintenance, commissioning, and service operations across a wide range of voltage levels.

Typical Applications Include:

- **Power Utilities:** Locating and repairing underground cable faults in distribution and transmission networks
- **Industrial plants:** Diagnosing faults in internal power distribution systems
- **Metro rail, airports, and infrastructure projects:** Ensuring uninterrupted operation of underground power supply networks
- **Renewable energy installations:** identifying cable faults in solar farms and wind turbine connections
- **Electrical contractors and service providers:** Portable solution for on-site cable testing, route tracing, and insulation assessment.

Technical Details

COMPAC 12

Specifications

Impulse Mode

Voltage range	0 - 6 kV / 0 - 12 kV selectable & continuously variable
Energy	750 J (full energy at each range)
Single Impulse	Yes
Selectable auto frequency per minute	Programmable
ARC module	Yes
ARC Stabilization Time	20ms approx
Indication	ON/OFF lamp indication Overheat indication

DC Test Mode

Voltage range	0 - 12 kV continuously variable (two stage)
Current	5 / 10 / 20 mA
Burn Current	50 mA at 12 kV

Sheath Test

Voltage	0 - 12 kV continuously variable
Current	50 mA

Prelocator

Maximum measuring range (KM)	0 - 100 km
Prelocation modes	TDR, ICM, ARM (MIM)
Resolution	0.1m
Sampling rate	200MHz
Pulse Width	40ns - 7 μ s
Pulse Amplitude	65V
VOP (V) m / μs	90 - 300 m/ μ s
Display	1200 x 800 px - 10 inch, color touchscreen LCD
No of records storage memory	> 100
Communication interface	USB
Control	Touchscreen and mousepad

Technical Details

COMPAC 12

General Parameters

Input Power Supply	230V AC \pm 10%
Power Frequency	50Hz or 60Hz \pm 5% Single Phase
Battery (Auxiliary Source)	Li-ion 25.2V, 8400mH
Battery backup – Approx	30 Min.
Battery charger	110 - 220V AC - 50Hz , 8.4V/3A DC
Earth Discharge	Soft automatic discharge through in-built solenoid
Over Load Protection	Input Current Limiter switch, fast blow fuse in mains and controlled supply
Dimensions (H X W X L) Approx	700mm x 425mm x 620 mm
Weight (Approx)	80 Kg

Environmental

Operating Temperature	-10°C to +55°C
Storage Temperature	-5°C to +60°C
Relative Humidity	95% RH at 40°C max. (non-condensing)

Safety

Safety Protection	Output HV cable interlock, Over Heat protection, Emergency OFF and Keylock
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Standard Accessories

- HV Output Cable 30kV - 5-meter length with heavy duty clamp
- Mains supply 1.5 sq. mm 3 core cable - 10-meter length
- Yellow / Green 10 sq mm earthing cable - 5-meter length with heavy duty clamp
- Operating manual

Optional Accessories

- Equipment Trolley
- Cable drum (as per requirement)
- Insulation Tester - 5kV/10kV

Note :

- Standard Warranty : 12 months
- Cable of other lengths shall be available as per requirement
- Handles are not considered in mentioned size
- Pictures are for illustration purposes only
- Specifications can be changed without any notice.