

# Ground Fault Locator (MGFL)



## Features

- Locates & pinpoint's DC Ground fault in ONLINE condition.
- Incorporates automatic capacitive balancing & is fully automatic.
- Highly immune to noise in the system.
- Extremely high sensitive to fault signal.
- Light weight and user friendly.

## Description

Floating DC systems are the back bone of any substation. Maloperation of DC system / non-availability of sound DC system can lead to very big catastrophe in the substation. And hence it is a necessity that the floating DC systems in the substation should be free from any faults. The DC Ground Locator MGFL helps substation engineers in locating, tracing, pinpointing DC Ground Faults in any floating DC system up to 300V DC in ONLINE condition. The instrument balance the capacitance of DC system automatically and is fully automatic to detect any faults. The instrument incorporates advanced signal processing to eliminate noise in the DC system and is very sensitive to any ground faults. It also helps in tracking mixing of source in dual battery system.

## Usage

The MGFL is a portable light weight instrument used to locate ground fault in DC systems. It consists of a Transmitter Unit and Receiver Unit. The transmitter is connected to live / non-live floating system up to 300V DC preferably on the DC bus. It then transmits low frequency and low voltage signal in the DC system without affecting the sensitive operation of relays. The transmitted signal is then tracked by receiver to locate the fault feeder and to track it further up to the point of fault. The instrument is fully automatic and detect earth faults / mixing of source at ease.

## Technical Specification

**APPLICATION** : used ONLINE / OFFLINE in any FLOATING DC SYSTEM up to 300 V.

**WEIGHT** : **TRANSMITTER** : 0.5kg  
**RECEIVER** : 0.2 kg

**POWER** : **TRANSMITTER** : RECHARGEABLE LI-ION BATTERIES CHARGED BY 9V CHARGER  
**RECEIVER** : RECHARGEABLE SITE REPLACEABLE LI-ION BATTERIES CHARGED BY 9V CHARGER

**ACCESSORIES** :  
 ▪ Receiver Unit  
 ▪ Transmitter Unit  
 ▪ Test Lead Set with Crocodile clips  
 ▪ Clamp 55 mm  
 ▪ Clamp 20 mm  
 ▪ Spare battery - 9V  
 ▪ Charger for 9v Battery - Receiver unit  
 ▪ Charger 5V - Transmitter unit  
 ▪ Instruction Manual

**SIGNAL VOLTAGE** :  $\leq 15$  V RMS variable

**SHORT CITCUIT CURRENT** :  $< 2$ mA

**SIGNAL FREQUENCY** :  $\leq 12$ Hz

**FAULT RESISTANCE** : 1 M $\Omega$ , 400 k $\Omega$ , 100 k $\Omega$ , 60 k $\Omega$  variants

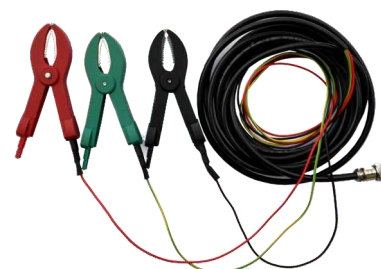
**SENSOR PROBE** : HIGH SENSE BIG PROBE - 55mm  
 HIGH SENSE SMALL PROBE - 18 mm

**CONTROL** : Fully automatic

**CAPACITIVE BALANCING** : Automatic

**TEMPERATURE** : **STORAGE** : 0 to 55 $^{\circ}$   
**OPERATING** : 0 to 55 $^{\circ}$  C

**DIMENSIONS in mm** : **TRANSMITTER** : 120x170x55  
**RECEIVER** : 95x175x40



Note : Specification & design subject to change without prior notice.



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