

GridWatch CFM-BR Product Description

CFM-MR is a mains powered fault Reporter that web-enable existing visual Earth Fault Indicators in the field by monitoring the status of the auxiliary relay output of these units.

A 4.5V DC signal is supplied by the CFM-BR unit that is switched by the Aux. relay of the unit being monitored. Up to 3 external Earth Fault Indicators can be web-enabled by one CFM-MR unit. Once a fault is detected, the unit will immediately communicate the fault over the web to the customer's monitoring network,

or if desired, the GridWatch server. The CFM-MR will also report when power is restored at the sub-station. The status of the CFM-BR is continuously monitored and any faulty CFM unit is automatically detected by the GridWatch Server Application.

The CFM-BR includes an optional security alarm switch input for site security monitoring. Cable faults and security alarms can automatically be reported to field service engineers via SMS if desired.

Installation & Commissioning

Installing the CFM-MR device on a cable network is a straightforward procedure involving the following steps:

- Fix the CFM-MR unit in place with the mounting screws provided or secure with suitable tie wraps.
- Attach the cable to the Auxiliary Relay output of the Earth Fault Indicator(s) being monitored.
- Insert a SIM Card into the holder provided
- Power up the unit by inserting the battery provided
- Press the TEST button on the Earth Fault Indicator to verify communications with the GridWatch Server

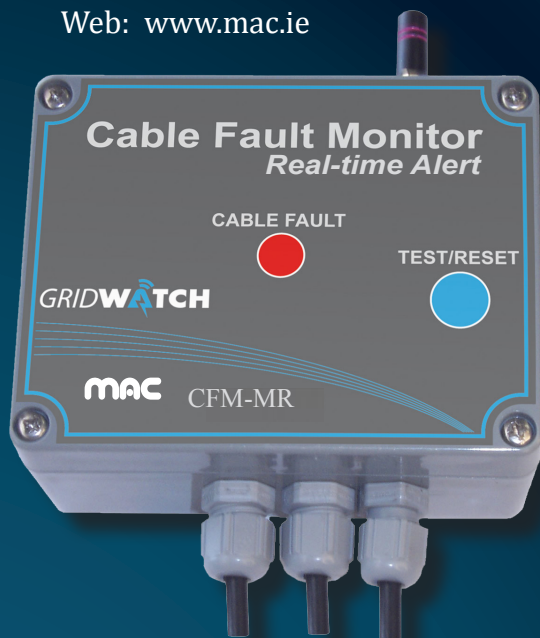
Server Application

Using one of the approved standard based communications protocols the CFMs communicate directly with a server application running on the utility's own network or the dedicated GridWatch Server. On detecting a fault the CFM immediately report the fault to the GridWatch server application. A dedicated algorithm identifies the location of the fault from the list of CFM fault messages received and, if required, transmits an SMS message (email optional) to a pre-selected list of field service engineers indicating the location of the fault. The status of each ring network is continuously indicated on a dashboard screen.

The GridWatch application also supports Plug&Play deployment of the CFMs and alarm signal input (if installed).

MAC LTD
Lonsdale Road
National Technology Park
Limerick
Ireland

Tel.: +353 61 334699
Fax: +353 61 338500
Email: info@mac.ie
Web: www.mac.ie



Technical Specifications

General	
Power Source:	85 - 265V AC
Sensor Interface	
Signal Type	4.5V DC @ 10mA
Number of Sensor Interfaces:	3
Minimum fault duration:	100ms
Fault Monitor	
Unit Reset	Auto reset on fault removal
Test/Reset button:	Manual push button
Alarm Switch Input (Optional)	
Type	Switch, switching 5V@10mA

Communication	
Type:	GPRS Network. (Options: CDMA & EDGE)
Antenna Options:	Internal, Stub or remote mount on 3 meter lead
Fault Detection:	Immediate alert
Environment	
Operating humidity range:	0 - 100% RH
Operating temperature range:	-20°C to 65°C
Degree of Protection:	IP65
Physical	
Dimensions:	15mm x 90mm x 55mm
Weight:	300g