

# Portable M300 Fieldpack

## IMCORP is a proven technology leader in power cable diagnostics.

The company's patented diagnostic technology, proven through testing of thousands of miles of underground cables, pinpoints the exact location of cable defects with unsurpassed accuracy. In addition to locating existing cable defects, IMCORP has extended its product line to include the latest **Portable M300 Fieldpack**. The Unit consists of a PD location matcher system, TDR (Radar), and partial discharge (PD) sensitivity calibrator technology.



## IMCORP M300 Fieldpack Capabilities

1. **M300 Matcher System:** Pinpoints the physical location of the PD along the cable.
2. **M300 TDR (Radar):** Identifies the length of the cable while determining the distance to the joints, neutral corrosion/disruptions, checking cable continuity and cable length measurements.
3. **M300 PD Sensitivity Calibrator:** Indicates the response of the shielded power cable before applying the PD test.

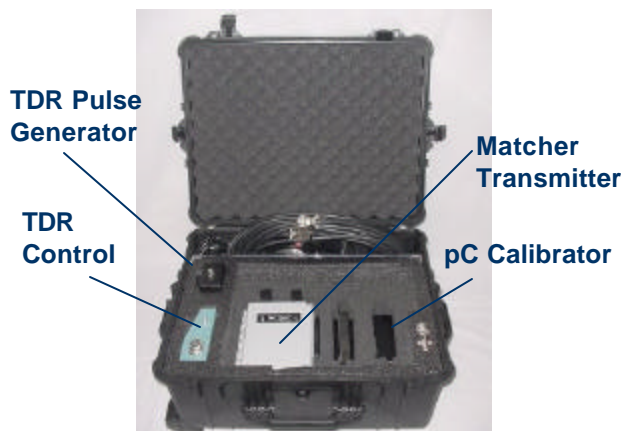
## What is the IMCORP M300 Fieldpack?

IMCORP has spent many years with cable diagnostics and the reliability of underground cables. Besides identifying the distance to the PD location the matcher system will pinpoint the defect physical location in the ground. Then with the added TDR and PD sensitivity/calibration measurement features the system becomes a robust heavy duty field diagnostic tool.

# Portable M300 Fieldpack

## IMCORP Fieldpack Capabilities

- 1. M300 Matcher System:** Once a defect or failure site has been located by the IMCORP Estimator system, the M300 Matcher system is used to find the defect's physical location. To locate a site the operator uses the defect's estimated location from one end of the cable and, using a measuring wheel, follows the cable path to the estimated location. The cable is exposed and the Matcher system transmitter is attached to the shielded power cable. The portable M300 is connected to one end of the de-energized cable. The M300 interprets the signal received from the transmitter and computes its location. This computed location is compared with the estimated location obtained by the previous diagnostic test. If there is a difference between the estimated location and the transmitter's location, the distance to the defect is exactly the difference of these two measurements. The Matcher system assures the operator that the defect has been located and the cable will be correctly repaired.
- 2. M300 TDR (Radar):** With a few additional hardware components, a pulse generator and controller, the M300 TDR is a robust high resolution TDR unit capable of locating joints, neutral corrosion/disruptions, checking cable continuity and cable length measurements. The M300 used in TDR mode is a very powerful tool for mapping the topology shielded underground power cable.
- 3. M300 PD Sensitivity Calibrator:** Before testing a shielded power cable with a PD measurement equipment, such as the IMCORP PD Diagnostic system, the owner of the cable should be well aware of the absolute maximum sensitivity the PD test can achieve. What benefit is a PD location test if the PD signals from a defect cannot be detected? With the IMCORP picoCoulomb (pC) calibrator, and the proper software, the M300 Calibrator system can acquire pC sensitivity measurements on any medium or high voltage power cable.



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