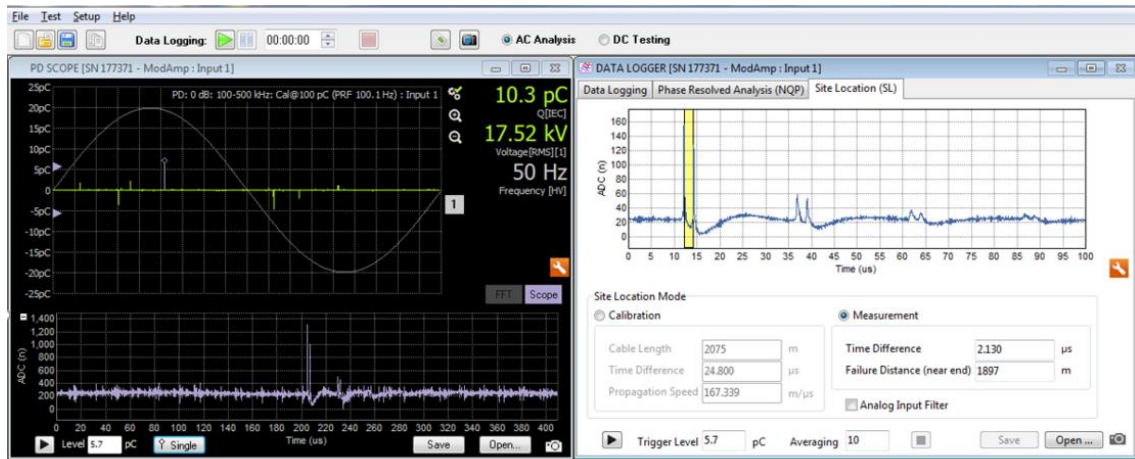




Easy, fast, and precise partial discharge site location using Haefely PD detector DDX 9121b

The Haefely PD detector DDX 9121b is able to localize and confirm the failure of a few picocoulombs (pC) for cable lengths up to 10 km (33 000 ft).



As per the screen capture above, PD activity of 10 pC could be detected at a distance of 1897 m from the cable near-end of an XLPE 12/20 kV cable with a length of 2075 m (6807 ft). Even the 4th reflection is still visible in the PD pulse time signal displayed in the «Site Location (SL)» tab. This implies that the same failure could be located even at a distance of 7948 m on a theoretical cable length of 8300 m! In this given example it is important to consider that a significant portion of the pulse energy is lost at every reflection. That means in the case of a real 10 km (33 000 ft) full cable length even PD levels lower than 10 pC can be detected at large distances.



One mouse click is enough to acquire these results, no special expertise or experts are necessary. The DDX 9121b is a market unique device providing one of the largest cable fault location resolution on the market together with the market-unique feature of triggering on charge Q level making the cable fault location easy and straightforward.

In the above screen capture of the application software, the effect of the powerful «Averaging function» can be seen. See the PD pulse time signal in the «Scope» vs «Site Location (SL)» tab. In «Scope» the 2nd reflection can be barely recognized, whereas in the «Site Location (SL)» tab even the 4th reflection is visible.

More information and description are available in our paper in «Related Files» below.

Related Files

[Tettex_TD_107_Innovative_PD_site_location.pdf \(2 MB\)](#)