testing systems typically comprise a remote unit that communicates with a main device via a communication link, e.g. a cable. The remote unit may be held by a single operator while standing directly adjacent to an electrode of the automated earth fault testing system, wherein the respective electrode may be placed at a large distance from the main device and/or other electrodes of the automated earth fault testing system. Accordingly, the respective checks performed in intervals are simplified due to the automated earth fault testing system having the remote unit that can be used by the single operator. For instance, US 2013/0154651 A1 does show such an earth ground tester having a remote unit.

However, the system is known so far still require that the operator manually checks several areas to be investigated in a subsequent manner in order to identify an earth fault at these sites.

Accordingly, there is need for a higher degree of automation.

In one aspect, the present disclosure refers to a method of measuring earth ground resistance. The method comprises the steps of:

- Performing an earth ground resistance measurement by means of an earth ground measurement device, thereby obtaining measurement data,
- Gathering the measurement data via at least two different channels of the earth ground measurement device such that multiple measurements are performed at once, wherein each channel is configured to perform the earth ground resistance measurement, and
- Uploading the measurement data automatically to a remote processing module separately formed with respect to the earth ground measurement device.

In another aspect, the present disclosure refers to a system for measuring earth ground resistance. The system comprises an earth ground measurement device that has a test module configured to perform earth ground resistance measurements. The earth ground measurement device comprises at least two different channels, wherein each channel is configured to perform the earth ground resistance measurement. The earth ground measurement device further has at least one