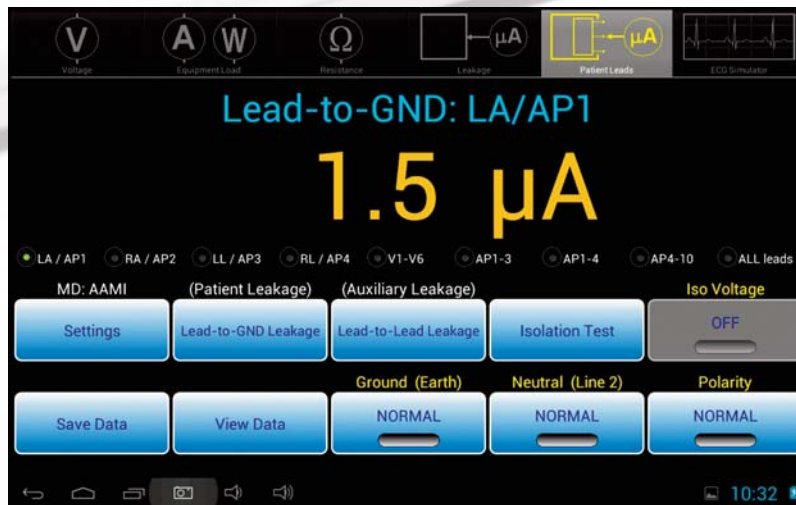# Vision Pad Technology

Electrical Safety/Performance Assurance and Preventive Maintenance

The vPad ES 2 & Rugged 2 series of electrical safety testing devices combines an Android tablet (wired or wireless) with a measurement platform to create a revolutionary test system. The measurement platform provides the normal assortment of electrical measurements (voltage, current and resistance) of the commonly used medical Electrical Safety Standards. The Android tablet provides unprecedented usability and scalability for a test instrument, with a large 10.1" (1920 x 1200) color display, WiFi (802.11 b/g/n) and bluetooth connectivity, USB, 16 - 32 Gb memory and much more. The screenshot below shows a typical display with the large, easy to read measurement results and function selection buttons.

Used in manual mode, all the required parameters are measured individually, but the results must be saved manually. As results are saved, a test record is created. While testing, comments can be added to results as they are saved, and a 25 point Equipment Inspection (General Devices Acceptance Procedure (no. 438-20081015-01), published by ECRI) can be performed. When testing is complete on a device, the test results can be saved as a report.

Innovation by design

Productivity — Our Technology Working For You

Optional Apps

vPad-AS, vPad-NFPA and vPad-A6
Expand your inspection capabilities, standardize your test methods, and reduce testing times.

The vPad-AS, vPad-NFPA and vPad-A6 are automation applications for the vPad-ES 2 and vPad-Rugged 2 Electrical Safety Analyzers. These apps provide the ability to automate the electrical safety test the way you require, to the Standard you want. Automation sequences, to follow the required Standard, can be created for as many scenarios as you can envisage, with no restrictions. These autosequences can be named to your preference, with an additional description field to provide details of what the autosequence entails – no more guessing. Test Instructions can be displayed, along with pictures or video to describe what to do during the test. In addition to this flexibility in creating electrical safety autosequences, an Equipment Inspection, up to 50 steps, can also be tailored to your needs.

vPad Check - The ultimate level of automation.
Using a script based Checklist, the autosequence can now be any number of tasks, in any order, with pass / fail limits applied. Individual tasks can be almost anything: inspect, measure, pass/fail, electrical safety sequence (vPad-AS or vPad-A6), etc. You will even be able to control other devices either wired or wirelessly, and import their test results. You can now create the test you want.

vPad-mT - Export Medtester files to a vPad compatible file.
If you are currently working with a CMMS program that produces medTester export files, vPad-mT will convert the files (MTEXPORT.ITM, MTEXPORT.LST, MTEXPORT.IDN) into a vPad-Check compatible file. (Pre-requisite: vPad-Check)

vPad-XPORT - Convert files to be ready in almost any program.
vPad creates test reports in a text file format. vPad-XPORT can convert those files into a format that is compatible with your CMMS program. Currently, vPad-XPORT supports CSV, XML and MUP file formats, but if you can define your needs, we can probably create a conversion that works for you. Works in conjunction with vPad-mT.

vPad-EQM - Track equipment and work orders.
vPad-EQM is a simple and easy-to-use equipment manager app for your vPad system. Import your equipment information from any asset program that can create an Excel spreadsheet, or create it on-the-go as you encounter the equipment. Trace your work through work orders and test reports.

vPad-CAL - Track the test equipment inventory, its calibration status, and include this information in the test record.
As accreditation requirements change, the need to follow the tenets of the Quality Systems approach to all aspects of medical device maintenance is becoming the norm. One of these tenets is traceability. One of the requirements of a good, traceable service, preventive maintenance and calibration program is the ability to demonstrate that the work was performed using appropriate, calibrated test instruments. vPad-Cal provides a tool to track the test equipment inventory, its calibration status, and include this information in the test record for a device through the use of vPad-Check.

vPad-STM - Create automated electrical safety tests.
vPad-STM™ is a software application (App) which may be installed on the vPad-ES 2 and vPad-Rugged 2 electrical safety analyzers, and which may be used in conjunction with vPad-AS™ and/or vPad-A6™ Apps to create automated electrical safety tests of arbitrary complexity. Such tests may be required when evaluating electrical safety of medical devices in full conformance with IEC standards. vPad-STM provides these benefits when combined with the test capabilities of vPad-AS and vPad-A6:

✔ perform IEC electrical safety tests of equipment providing a variety of medical functions, where each medical function may have a differing number of applied parts (patient leads) and protection class (Type B, BF or CF)

✔ perform tests which combine measurements from different IEC safety standards, for example, perform leakage testing per IEC60601 in combination with insulation resistance testing per IEC62353

✔ perform electrical safety tests in accordance with Edition 2 of IEC60601, instead of Edition 3 which is the default used by vPad-AS when the "limits per standard" setting is enabled

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