



# In this month's update:

October 2013

## - TEST NAVI REPORTS

[Click Here](#)

Release of the report for

### **- A proposal: Mechanical pressure duty cycle test which can accelerate degradations around interfaces of photovoltaic module laminate materials**

(Soh Suzuki\*, Kazuaki Ikeda\*\*, Eimo Kin\*\*, Takuya Doi\*\*

\*ESPEC Corporation/\*\*AIST)

Although long life is being demanded of photovoltaic modules, the testing currently being done on them is limited to validation tests, which does not enable their long-term reliability to be guaranteed. As a result, the market is demanding acceleration testing that can ensure long-term reliability, but the long test times required by conventional acceleration testing are a problem. The research described in this paper was done as a joint project with AIST. Its aim was to survey problems occurring in the market and investigate a new type of acceleration testing known as load cycle testing.

## - RESEARCH : TEST HANDBOOK

[Click Here](#)

### **Learning more about acceleration**

- |  |  |
|--|--|
| 1. Basic Life Prediction Formulas                | 2. Soldered Joint Life Prediction Formulas |
| 3. Plastic and Adhesive Life Prediction Formulas | 4. PCB Life Prediction Formulas            |
| 5. Capacitor Life Prediction Formulas            |  |

## - NEW SERVICE – PRODUCT REGISTRATION

Register your products to gain benefits such as software upgrade of our network features, etc.

### **Initial sign-in instruction is shipped with Platinous J series.**

[Click Here](#)

## - TEST METHOD DOWNLOAD

Environmental test standard program pattern can be downloaded from Test Navi easily.

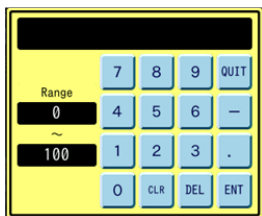
ISO 16750 for Road vehicles, IEC for PV, IEC for Environmental testing, etc. **Play video to see how to download.** [Click Here](#)



- NEW PRODUCT

■ MODEL CHANGE

## ESPEC BENCH-TOP SH/SU SERIES IS UPDATED WITH NEW FEATURES

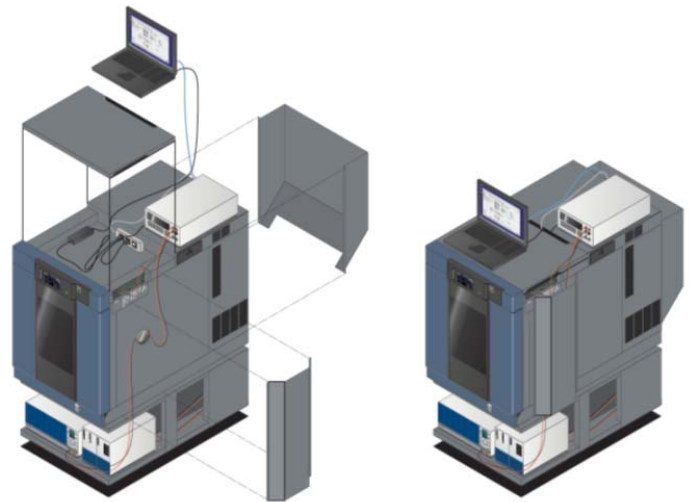


Conforms to CE and RoHs



- **Save your space!** ..... Space saving solution appropriate for laboratory
- **Save your test preparation time!** ..... Easy integration with various measurement instruments

Detachable connecting terminal for easy wiring, utilizing rooftop space for placing cables, AC adapters and accessories, web camera & viewing window for monitoring, small door for easy test sample setting, various convenient stands(single/double stacking) to meet customer's demands.



- **Save your data analysis!** ..... New controller: 4.3" Color touch panel display (Multilingual) with Ethernet access, USB access, etc.
- **New features!**
  - Wider temperature range up to +180°C(optional)
  - Faster change rate up to 5K/min (launched for 2014)
- **Specifications**
  - Temperature & humidity and Temperature only
  - Sizes from 22.5L to 64L.
  - Temperatures as wide as -60 to +150°C to +180°C (optional)
  - Humidity as wide as 30 to 95%RH

[For more details](#)



- EVENT/SEMINAR

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ESPEC's worldwide exhibition schedule for 2013

<New!> **InterBattery 2013**

October 16 - 19 Coex, Seoul, Korea

<http://www.interbattery.or.kr/eng/>

- EVENT/SYMPOSIUM

[Click Here](#)

**ESPEC joins Tempmeko 2013 -**

**Symposium on Temperature and Thermal Measurements in Industry and Science**

*14 – 18 October, 2013 - Congress Centre of VIDAMAR Resorts Madeira , Madeira, Portugal*

For more details: <http://www.tempmeko2013.pt/home.php>

TECHNNICAL PROGRAM BY ESPEC THURSDAY 17 OCTOBER 14:15~(HMC-11: Sensors)

**Title: “A NOVEL HYGROMETER”PTB SENSOR” DESIGNED FOR  
ENVIROMENTAL TEST CHAMBERS “**

Presented by

Satoru Yamauchi, Kensuke Akamatsu - Technical Development Headquarters, ESPEC CORP.  
Hisashi Abe, Hiroshi Kitano, Tamio Niwa, Minami Amano - National Metrology Institute of Japan  
(NMIJ), AIST, Tsukuba, Japan

For more details: <http://www.tempmeko2013.pt/techprog.php>

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<http://www.test-navi.com/eng/index.html>

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