

**IEEE Stationary Batteries 2011 Collection: VuSpec****IEEE Stationary Batteries 2011 Collection: VuSpec**

A complete reference with 26 standards, essential papers, and convenient tools wrapped inside an easy-to-use interface that runs inside your web browser. You need this product CD if you are designing, manufacturing, sizing, selecting, installing, maintaining, testing, or operating storage batteries used in stationary and portable applications, including generating stations, substations, energy storage, industrial control, emergency/standby generator sets, emergency lighting, telecommunications, portable computing, and uninterruptible power supplies. Covers rechargeable lead-acid, nickel-cadmium, lithium-ion, and other types of batteries.

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- 450™-2010 IEEE Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications
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- 485™-2010 IEEE Recommended Practice for Sizing Lead-Acid Batteries for Stationary Applications
- 535™-2006 IEEE Standard for Qualification of Class 1E Lead Storage Batteries for Nuclear Power Generating Stations
- 937™-2000 IEEE Standard for Qualification of Class 1E Lead Storage Batteries for Nuclear Power Generating Stations
- 1013™-2007 IEEE Recommended Practice for Sizing Lead-Acid Batteries for Stand-Alone Photovoltaic (PV) Systems
- 1106™-2005 IEEE Recommended Practice for Sizing Lead-Acid Batteries for Photovoltaic (PV) Systems
- 1115™-2000 (R2005) IEEE Recommended Practice for Sizing Nickel-Cadmium Batteries for Stationary Applications
- 1115a™-2007 IEEE Recommended Practice for Sizing Nickel-Cadmium Batteries for Stationary Applications Amendment 1: Additional Discussion on Sizing Margins
- 1184™-2006 Guide for Batteries for Uninterruptible Power Supply Systems
- 1187™-2002 Recommended Practice for Installation Design and Installation of Valve-Regulated Lead-Acid Batteries for Stationary Applications
- 1188™-2005 (R2010) IEEE Recommended Practice for Maintenance, Testing, and Replacement of Valve-Regulated Lead-Acid (VRLA) Batteries for Stationary Applications
- 1189™-2007 IEEE Guide for Selection of Valve-Regulated Lead-Acid (VRLA) Batteries for Stationary Applications
- 1361™-2003 IEEE Guide for Selection, Charging, Test and Evaluation of Lead-Acid Batteries Used in Stand-Alone Photovoltaic (PV) Systems

- 1375™-1998 (R2003) IEEE Guide for the Protection of Stationary Battery Systems
- 1491™-2005 IEEE Guide for Selection and Use of Battery Monitoring Equipment in Stationary Applications
- 1526™-2003 IEEE Recommended Practice for Testing the Performance of Stand-Alone Photovoltaic Systems
- 1547™-2003 (R2008) IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems
- 1547.1™-2005 IEEE Standard Coinformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power System
- 1547.2™-2008 IEEE Application Guide for IEEE Std 1547™, IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems
- 1562™-2007- IEEE Guide for Array and Battery Sizing in Stand-Alone Photovoltaic (PV) Systems
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- 1657™-2009 IEEE Recommended Practice for Personnel Qualifications for Installation and Maintenance of Stationary Batteries
- 1660™-2008 IEEE Guide for Application and Management of Stationary Batteries Used in Cycling Service
- 1661™-2007 IEEE Guide for Test and Evaluation of Lead-Acid Batteries Used in Photovoltaic (PV) Hybrid Power Systems
- 1679™-2010 IEEE Recommended Practice for the Characterization and Evaluation of Emerging Energy Storage Technologies in Stationary Applications

**Includes 20 Bonus Papers...**

- Ventilation Requirements for VRLA Batteries in Occupied Buildings, Dick, Bruce H., The Battery Man® May and June 2004.
- Assessment of Lead-Acid Battery State of Charge by Monitoring Float Charging Current, Floyd, K.D.; Noworolski, Z.; Noworolski, J.M.; Sokolski, W., Telecommunications Energy Conference, 1994. INTELEC '94., 16th International, 30 Oct.-3 Nov. 1994. Pages: 602-608.
- Batteries and Codes: Who Wants What?, McCluer, Steve (American Power Conversion Corporation), Conference Proceedings, BattCon 2004.
- Memory Effect in Stationary Ni-Cd Batteries? McDowall, Jim (Saft America, Inc.), Forget About It! Conference Proceedings, BattCon 2003.
- The Never Ending Pursuit of Float Voltage Uniformity in Stationary Reserve Battery Plants, Feder, D.O.; Carosella, G., Telecommunications Energy Conference, 1994. INTELEC '94., 16th International, 30 Oct.-3 Nov. 1994. Pages: 609 - 617.
- Bringing Back to Life an AT&T Canada Venture, Szasz, R.; Miltiadou, L.; Bringing Telecommunications Energy Conference, 2002. INTELEC. 24th Annual International, 29 Sept.-3 Oct. 2002, Pages: 524 - 529.
- Strategies for Overcoming the Adverse Effects of Imbalances in the Second Order Reactions in Valve Regulated Lead Acid Cells, William B. Brecht - Intelec '98, paper 19.1

- Operational Characteristics of VRLA Batteries Configured in Parallel Strings, Bruce A. Cole, Robert J. Schmitt, Joseph Szymborski – Intelec '98, paper 16.1
- Can a Battery Ohmic Tester Distinguish a Good Cell From the Pool of Better Ones?, Zbig Noworolski, Ulo Reskov – Intelec 2002, paper 14.3
- Ohmic Test Instruments: A Telecom User's Comparison, William Cantor, Martin Malek, John Woltman – Intelec 2004, paper 29.1
- System Integration of Lithium-Ion battery in Telecommunication Back-up Power Plant, Patrick K. Ng, Gregory Mathiesen, Roy Davis – Intelec 2005, paper 2.6
- Reference Electrode Measurements, Field Experience, Use and Analysis, Anthony G. Cannone, William P. Cantor, David O. Feder – Intelec 2006, paper 21.4
- Recovering Lost Capacity in 2 Volt VRLA Cells by way of the IOVR™ Process and the Duration of that Recovered Capacity, Peter J. DeMar – Intelec 2008, paper 2.1
- Internal ohmic measurements and their relationship to battery capacity: EPRI's ongoing technology evaluation, Eddie Davis, Dan Funk, Wayne Johnson – Battcon 2002
- Lies, damned lies and statistics: The statistical treatment of battery failures, Jim McDowall – Battcon 2005
- Ohmic readings: A battery manufacturer's perspective, John P. Gagge, Jr. – Battcon 2006
- A long-term evaluation of battery maintenance and testing activities at the New York Power Authority, Bill Cantor, Daniel Levin – Battcon 2007
- Understanding lithium-ion technology, Jim McDowall – Battcon 2008
- Redox flow energy storage for fluctuating renewable energies, Jens Noack, J. Tübke – Battcon 2009
- Energy storage systems for UPS and energy management at the consumer level, Marco Piemontesi, Cord Dustmann – Battcon 2010

**Plus!**

IEEE Calculation of Capacity by Rate-Adjusted Method (Microsoft® Excel® 5.0 or later required)