EAGLE EYE POWER SOLUTIONS

Eagle Eye Power Solutions IEEE Solutions

Eagle Eye Power Solutions understands the importance of testing and maintaining batteries per IEEE standards. The most common IEEE standards for battery maintenance, testing & monitoring are below:

IEEE 450-2010 is the recommended practice for maintenance, testing, and replacement of Vented Lead-Acid (VLA) stationary batteries.

IEEE 1188-2005 is the recommended practice for maintenance, testing, and replacement of Valve-Regulated Lead Acid (VRLA) batteries for stationary applications.

IEEE 1106-2005 is the recommended practice for maintenance, testing, and replacement of Vented Nickel-Cad mium Batteries (NiCad) for stationary applications.

IEEE 1491-2005 is for Selection and Use of Battery Monitoring Equipment in Stationary Applications.

MONTHLY INSPECTIONS				
VLA	**VRLA**	**NiCd**	**Maintenance Activities (Perform ALL items checked for your battery type)**	**EEPS Solution**
X	X		Verify float voltage at the battery terminals	IBEX-Series
X	X	X	Inspect general appearance and cleanliness of battery room or cabinet, racks, and batteries. Inspect for evidence of terminal, connector, and rack corrosion	N/A Visual
X	X	X	Verify charger output current and voltage	IBEX-Series
X		X	Verify battery electrolyte levels	ELM-Series / SG-Series
X	X	X	Verify ambient temperature and ventilation systems	BMS-Series / IBEX-Series
X			Inspect for any unintentional battery grounds	GFL-Series
X			Record pilot cell's voltage, specific gravity, and electrolyte level	SG-Series
X	X		Inspect all installed battery monitoring systems are operational	BMS-Series / ELM-Series
QUARTERLY INSPECTIONS				
VLA	**VRLA**	**NiCd**	**Maintenance Activities (Perform ALL items checked for your battery type in addition to monthly inspections)**	**EEPS Solution**
X	X	X	Verify voltage of each cell	BMS-Series / IBEX-Series
X			Verify specific gravity of at minimum 10% of battery string cells	SG-Series
X	X	X	Verify temperature of a representative sample of at minimum 10% of the battery cells	BMS-Series / BTM-Series
		X	Verify float voltage & current at the battery terminals	BMS-Series/ IBEX-Series
	X		Verify cell internal ohmic resistance values	BMS-Series / IBEX-Series
YEARLY INSPECTIONS				
VLA	**VRLA**	**NiCd**	**Maintenance Activities (Must perform ALL items checked for your battery type in addition to monthly and quarterly inspections)**	**EEPS Solution**
X			Verify specific gravity of all battery cells	SG-Series
	X		Verify AC ripple current	IBEX-Series
X		X	Record each cell temperature	IBEX-Series
X	X	X	Verify cell-to-cell terminal connection resistance	BMS-Series/ IBEX-Series
X		X	Inspect cell condition of each cell in contrast to the monthly inspection. Verify the structural integrity of the battery rack	N/A Visual

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IEEE / NERC Ultra Max Plus Battery Testing Kit

Complete Ultra Max Plus Kit

Product Overview

The Ultra-Max Plus Kit is the complete solution for testing per IEEE and NERC standards. The Ultra-Max Plus Kit has three parts: an IBEX-Ultra Portable Ohmic Battery Tester, SG-Ultra Max Digital Hydrometer, and Exmons Ultra+ All-in-One Management Software.

The Ultra-Max Plus Kit tests internal resistance, voltage, connection resistance, temperature, DC current, ripple current, specific gravity (state of charge), and electrolyte temperature. Eagle Eye's IEEE/ NERC Kits are completely customized to meet your specific battery testing requirements. Let us know your specific applications, testing requirements and budget, and we can tailor a battery testing kit to fit your needs.

Features

- Complete Battery Testing Kit meets IEEE/NERC Requirements for battery maintenance
- Measures: Internal Resistance, Voltage, Inter-Cell Resistance, Temperature, DC Current, Ripple Current, Specific Gravity and Electrolyte Temperature
- Store up to 4,800 results with IBEX-Ultra and 1,024 with SG-Ultra Max
- Exmons Ultra+ Software included for All-in-One battery management

Technical Specifications

IBEX-Ultra Key Specs:	**Battery Capacity Range:** 10 – 6000 Ah **Voltage & I.R. Range:** 0.1 – 60 VDC / I.R. – 50 VDC **Internal Storage:** 600 or 4800 Test Results, 4 or 80 Battery Models **Resolution:** Voltage: 10 mV Resistance: 0.001 mΩ Temperature: 0.5 C (0.5 °F) **Accuracy:** DC Voltage: ±0.5% Internal Resistance: ±0.5% Temperature: ±2.0%
SG-Ultra Max Key Specs:	**Measurement Range:** Density: 0.000 – 3.000 g/cm3 Sample Temperature: *0 – 40 °C (32 – 104 °F) Viscosity: 0 – 1,000 mPa **Internal Memory:** 1024 Results **Resolution:** 0.0001 g/cm3 **Accuracy:** Density: 0.001 g/cm3 Temperature: ±0.2 °C (±0.4 °F) **Operating Environment:** 10 – 50 °C (-15 – 122 °F)

IEEE / NERC Requirements

- Meets IEEE Standards: **450-2010, 1188-2005, 1106-2005**
- NERC Compliance: **PRC-005-6**

Kit Includes

- IBEX-Ultra Kit
- SG-Ultra Max Kit
- Exmons Ultra Plus Management Software

Ordering Information

Model No.	Description
Ultra Max Plus Kit	IBEX-Ultra Battery Tester, SG-Ultra Max Digital Hydrometer, Exmons Ultra Plus Software