# ✓ WAVETECH

# BARS

Battery Assessment and Rejuvenation System for up to 16 monoblocs. (Between 5Ah to 10Ah)

# Improving Battery Health with Advanced Rejuvenation



BARS is a comprehensive solution for the assessment, rejuvenation, and reconditioning of stationary VRLA batteries. By using precision charging with Crystal Control Technology and a specialized electrolyte equalization process, BARS restores batteries to peak operational condition, enhancing their performance and extending their service life. Whether reconditioning batteries after prolonged shelf storage or rejuvenating batteries after their first life of operation, BARS ensures they remain in optimal health, significantly reducing the need for frequent replacements.

# **Key Features**

# **Field-Ready Reliability**

BARS significantly improves the reliability and lifespan of 12V AGM batteries in field UPS operations. Its straightforward, effective approach ensures these batteries remain dependable, even in challenging conditions, safeguarding power supply stability.

3

# **Advanced Issues Identification**

BARS provides valuable data that, when combined with the expertise of WT R&D personnel, enables the identification and addressing of material and design issues such as separator degradation, internal shorts, unsuitable grid alloys, and compromised active materials

# **Battery String Optimization**

BARS strengthens underperforming batteries within a string, addressing the common issue of being limited by the weakest member. This enhancement ensures all batteries in the string operate at peak efficiency, extending overall string life and preventing premature failures.



# **Reconditioning Process**

# **Initial Assessment:**

BARS starts with a thorough diagnosis using WaveTech's Battery Condition Assessment Tool (BCAT).

# Electrolyte Equalization:

A patented method balances the electrolyte concentration across the battery.

# **Precision Charging:**

Monoblocs undergo tailored recharging controlled by a WaveTech charger.

# **Optimization and Rejuvenation Enhancement:**

Crystal Control Technology optimizes charge and enhances rejuvenation.

# Final Assessment:

The BCAT reassesses the battery to confirm rejuvenation success.

# **Benefits**

# A Full Second Life for Used Batteries

BARS reconditions used and stored batteries, restoring them to full capability and extending their usability at a fraction of the cost of new batteries.

# Maximize Rejuvenated Performance

Through a tailored rejuvenation process leveraging Crystal Control Technology, BARS maximizes the performance of each battery, adapting specifically to its condition and type, thereby extending its service life.

# **Battery Grading for Optimal String Performance**

Enable quick and precise grading of batteries into groups, ensuring each string contains only similarly performing units. This gains more stable, efficient, and sustainable battery operations.

# **Boost Sustainability**

BARS' efficient rejuvenation process reduces battery waste, significantly cutting environmental impact and promoting sustainability.

# **Technical Specifications**

915 mm	755 mm	
		885 mm

#### Main

Input Voltage	220V / 50-60Hz +/- 10%
Rated power consumption	≤1600VA (chargers 800VA, Motion 800VA)
No. of batteries processed	8 (8x5Ah, 8X35Ah)
Connectivity	Ethernet/WIFI
Operating time	Up-to 20 hours per rejuvenation/conditioning
Equipment supplied	Mains cable, Touchscreen, Ethernet cable, WaveTech's State of Charge device
Physical	
Dimensions (W/L/H) in mm.	755/915/885
Net Weight	Approx. 150Kg
Colour	Blue
Conformance	
Safety Standards (chargers)	UL60950, TUV EN60950-1, CCC GB4943, BSMI CNS14336-1, EAC TP TC 004 approved; Design refer to EN60335-1, EN61558-2-16
Safety Withstand Voltage (Chargers)	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.25KVAC
Safety Isolation resistance	I/P-O/P, I/P-FG, O/P-FG;100M Ohms/500VDC/25C/70RH
Standards (drive, charge)	IEC/EN 61800 -5 -1, UL 508C
EMC Emission	Compliance to EN55032, GB/T9254, Class B, EN61000-3-2,-3, BSMI CNS13438, EAC TP TC020
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61000-6-2(EN50082-2), heavy industry level, criterial A,EAC TP TC 020
Environmental	
Operating temperature in C	0 - 45
Humidity	20 - 85% (no-condensing)
Acoustic level	56 dB

Conditions Indoor use, no corrosion or inflammable vapours or particles.

20

### Warranty

**IP** rating

As per contractual terms\*