



## BATTERY MANAGEMENT MADE EASY

### Batteries Dying Early...



Changing batteries on an electric forklift truck can be a confusing, time consuming process that, when done incorrectly, leads to:

- **Shortened battery run times**
- **Shortened battery life**
- **Wasted money, time and effort**

Almost all non-managed battery rooms have more batteries than they need and do not use their batteries correctly.

### ...Getting More Performance



An iBOS Pro system eliminates the guesswork and the worry involved with managing your battery room. Some of its features are:

- **Simplified and directed battery selection**
- **Data analysis**
- **Longer battery life**

The iBOS Pro can handle 350 chargers per controller and 9 battery pools, making it the essential iBOS for larger battery rooms.

## EASILY CONFIGURABLE

The iBOS Pro Controller is the most powerful and configurable iBOS controller and is designed for larger battery rooms that have multi-level battery racks and utilise a battery changer. With a subscription, it allows connection to the iBOS World Web Service for up to five years of management reporting. With its list of optional accessories, iBOS Pro is easily configurable to give you the best fit for your battery room.

## EXTENDS BATTERY LIFE AND EFFECTIVENESS

iBOS monitors all batteries on a pool and eliminates operator judgement in battery selection by determining which battery has had the longest cooling time since charging.

Site tests have shown that if battery selection is left to an operator, 30% of the batteries will be underutilised and 20% will be overused. The result: uneven battery usage, premature battery failure and lost productivity.

The iBOS® (Intelligent Battery organising System) with Real-Time Monitor enables the most cost-effective utilisation of your pool of batteries. It ensures proper battery rotation, which is critical to long battery life and maximum run time.

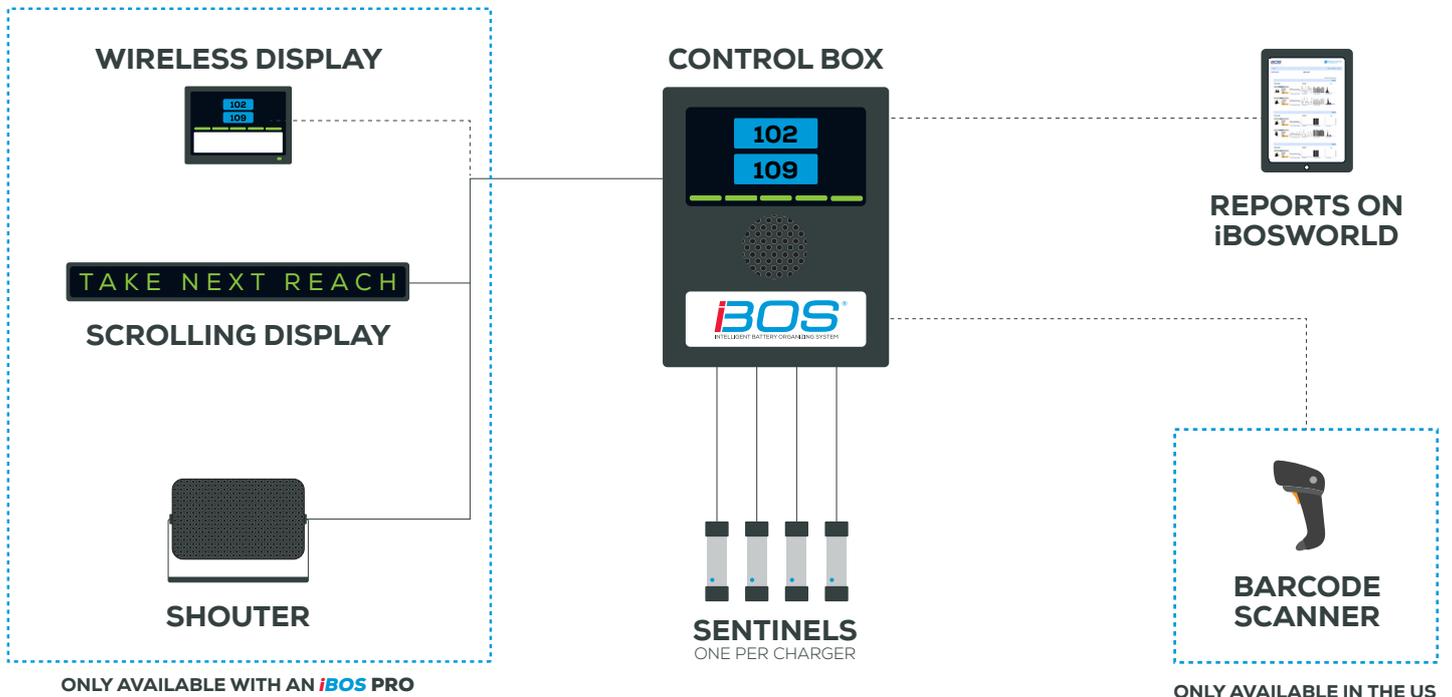


## FEATURES AND BENEFITS

- **EASY TO USE**  
The iBOS has a simple read and react system and a large scrolling display that tells forklift operators the correct battery to pick next.
- **REDUCES MISPICKS**  
The shouter sounds an alarm when the operator takes a battery that hasn't got the pick light.
- **REAL-TIME MONITOR**  
Provides all the information needed to efficiently manage the battery pool.
- **FOR MID-SIZE BATTERY ROOMS**  
The iBOS Plus manages 100 chargers and 9 battery pools.
- **LONGER BATTERY LIFE**  
6 months additional life as well as 30 minutes additional run time due to longer battery cool down. This leads to fewer
- **BETTER BATTERY ROOM VISIBILITY**  
Identifies non-working equipment and problems in the battery room via management reports.
- **ACCURATE BATTERY PURCHASES**  
Helps managers decide if there are too many or too few batteries in the pool.
- **FEWER AND FASTER BATTERY CHANGES**  
Save 2 to 5 minutes per change and has 30 minutes longer battery run time resulting in 10-20% fewer battery changes.

## HOW IT WORKS

Almost all non-managed battery rooms have more batteries than they need, do not use their batteries correctly, and managers typically guess at the correct number of batteries to purchase. This all leads to wasted money, time and effort. The iBOS system knows when the chargers finish charging and a simple screen or pick light automatically tells the operator exactly which charger to get their next battery from. If the wrong battery is selected, the shouter sounds. It is like a navigation system for your battery room!



### iBOS PRO CONTROLLER

The iBOS Pro is the most powerful and configurable iBOS controller and manages up to 350 chargers and up to 9 battery pools.

### SENTINEL

A sentinel constantly monitors the charger voltage to establish the charge status of a battery. One Sentinel is required for each charger in your pool.

### SCROLLING DISPLAY

Bright scrolling LED sign tells operators which battery is to be selected next.

### WIRELESS DISPLAY

The bright touch screen display wirelessly communicates with the controller to tell the operator which fully charged battery to select.

### IBOSWORLD

iBOSWorld Web Service gives you battery room information right at your fingertips. It organises and makes sense of all of the activity that goes on in a battery room so that cost saving, efficient decisions can be made.

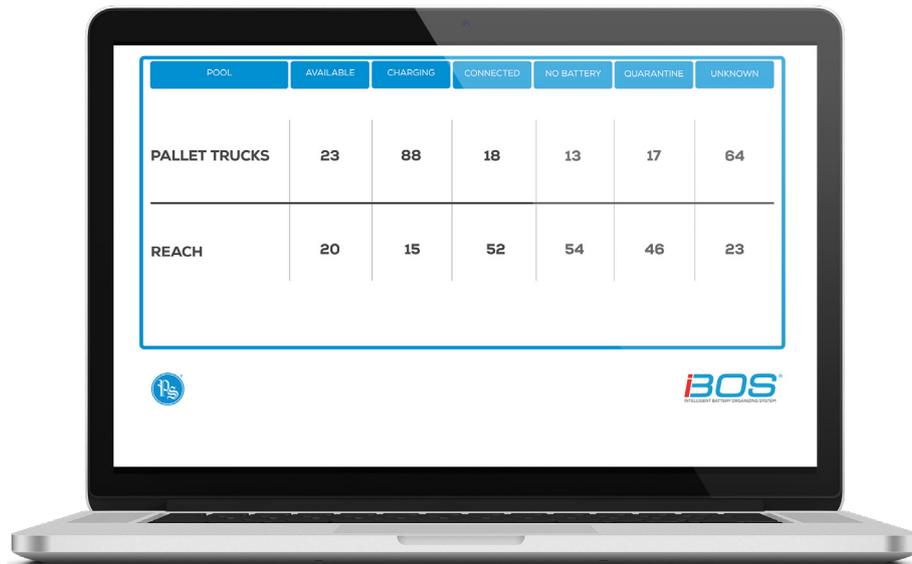
### BARCODE SCANNER

The barcode scanner enables the Battery Tracker option of an iBOS System. It is used to scan barcode labels on individual batteries and forklift trucks as well as to capture the forklift truck's dead man hours.

### PICK LIGHT

Easy-to-see blue pick light to indicate the correct battery to select.

## iBOS OPERATIONS DISPLAY



The operations display lets you see what is happening in your battery room right now. The operations display is a dedicated touch-screen computer that provides you with up to the minute alerts and actions in addition to the current status of your battery room. The optional add-on display can be mounted remotely in a supervisor's office or an operations centre. It can also be mounted in the battery room itself, if more operational information is needed in that area. The operations display utilises an all-in-one touch-screen computer, that communicates directly with the iBOS System Controller to provide multiple views on the operational status of the battery room. It supports multiple languages such as Spanish and French.

The easy-to-see screen is divided into four quadrants:

### STATUS QUADRANT

This displays status of charger pools and location of next available battery, the total available charged batteries in queue, the status of each pool's active chargers, chargers connected but not charging, chargers with no battery connected, chargers with batteries in quarantine that need further attention and chargers with unknown status.

### GRAPHS QUADRANT

This displays a 7-day graph of the minimum batteries available and shows in glance if the battery room has run out of batteries in the past week in any pool.

### ACTION QUADRANT

This displays what tasks need to be performed immediately to maintain operation efficiency and if the charger-splitter is in use, the screen indicates when to switch charger to another battery.

### ALERT QUADRANT

This displays data of the exact time of an alert which includes: mispicks, on-charge mispicks, charger no-starts, low battery connect voltages and more.

By simply touching the screen, the view within each quadrant can be changed to provide more filtered views or maximised to a single quadrant view.

## FEATURES AND BENEFITS

- Real-time view of your battery room
- All-in-one computer with touch screen
- Pre-loaded operations display software
- Multiple languages supported
- Includes 100 ft (30.4m) of data cable
- Can be used on desktop with the built in easel support bracket or wall mounted with a bracket



Managing a battery room is generally done in the blind without any real, hard information to work with and the bigger the battery room the more difficult and confusing it becomes. Most warehouse and DC battery fleets have either too few or too many batteries. Too few means battery assets are being over-utilized, reducing battery run time and life. Too many means expensive, unused assets are being wasted. But, how do you know if you have the right number of batteries? How do you know that you are not wasting money on unneeded battery purchases or lost productivity? You can't know without objective, accurate battery usage information which means you can't improve what you haven't measured.

iBOS can interface with [www.ibosworld.com](http://www.ibosworld.com). This optional web-based tool enables management to optimise the organisation's assets by analysing battery performance and facilitating more effective decision making through reports that are available anywhere in the world. The reports are easy-to-understand and summarise battery room performance to help guide battery and charger buying decisions; it gives you the data you need to save money by right-sizing your battery room. It also provides unique visibility on your battery room's energy usage. Importantly, it provides this benefit for a single facility or for all of your warehouses or DCs through the system's unparalleled enterprise-wide view.

iBOS World solves problems by giving you battery information such as if you have the right number of batteries, if you are wasting money with unneeded battery purchases and if you are losing productivity. It organises and makes sense of all the activity that goes on in a battery room so that decisions can be made that lead to cost savings and greater efficiency.

With over 25,000 chargers under management, the iBOS Web Service offers the simplest and lowest cost way to truly understand how your battery room is performing so that effective decisions can be made.

The available reports are:

### AVAILABILITY

Helps you right-size your battery fleet by providing daily battery availability and usage information telling you if you have too many or too little batteries.

### UTILISATION

Charger utilisation information signals uneven charger usage and identifies faulty equipment.

### MISPICK

Identifies the date and time of each mispick enabling prompt corrective action as it tells you if workers are using the system properly.

### COOL DOWN

Shows how much cool down time your battery fleet is actually obtaining.

### CHANGE DURATION

Shows how long your batteries actually take to charge. Used to identify short charged batteries, which can mean poor performing batteries or batteries being changed too early.

**FOR FURTHER INFORMATION ON iBOS PRO PLEASE VISIT:**



**[BIT.LY/2APKSCL](https://bit.ly/2APKSCL)**



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