VANDAPOWER

✓ One-stop shop
🚚 On-time delivery
💡 Independent technical advice

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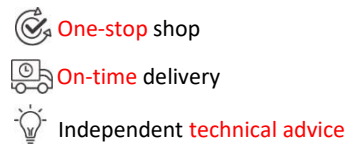industrial battery innovation

iBOS Management System

One-stop shop
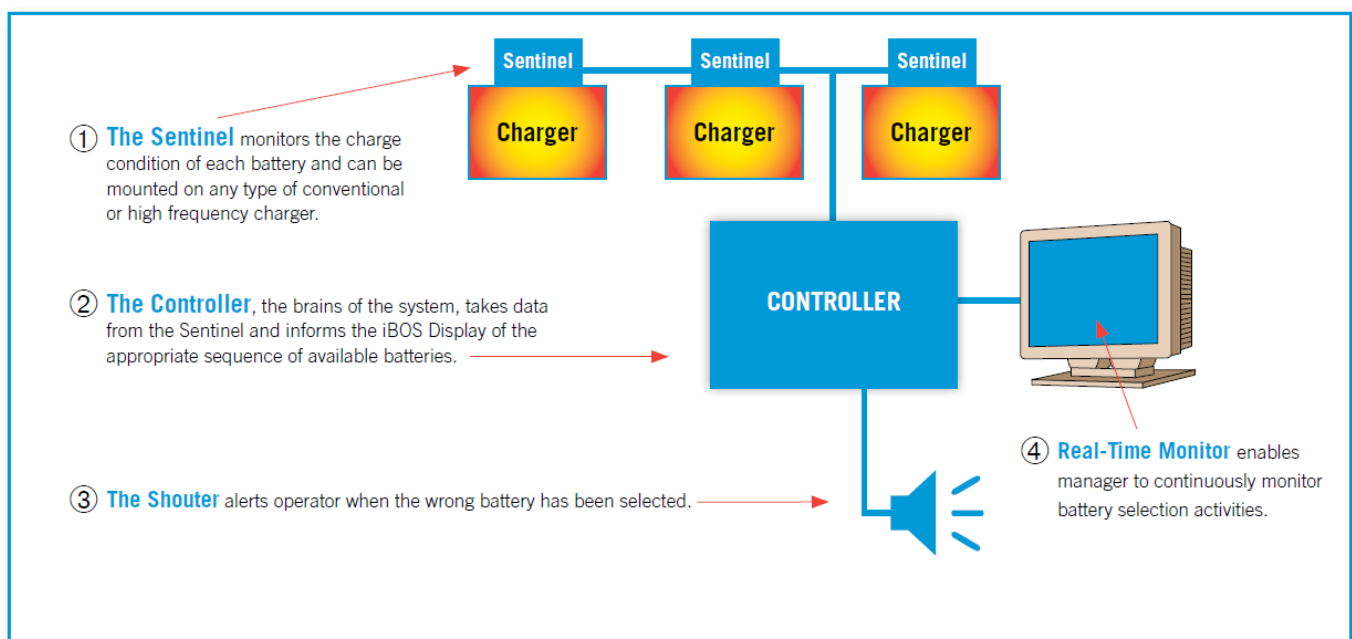On-time delivery
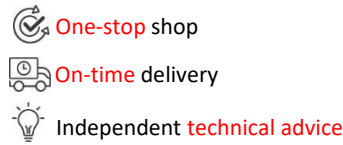Independent technical advice

iBOS Management System

Battery room management that extends battery life and effectiveness.

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

The iBOS® (Intelligent Battery Organizing System) with Real-Time Monitor enables the most cost-effective utilization of your pool of batteries. It ensures proper battery rotation, which is critical to long battery life and maximum run time. iBOS monitors all batteries in a pool and eliminates operator judgment in battery selection by determining which battery has had the longest cooling time since charging. Once charged, each battery is placed in queue. The simple-to-use iBOS "read and react" Display then tells the operator which battery to take. An audible alarm called the "Shouter" alerts the operator when the wrong battery is taken. And the Real-Time Monitor provides all the information needed to efficiently manage the battery pool.

How it works:

① **The Sentinel** monitors the charge condition of each battery and can be mounted on any type of conventional or high frequency charger.

② **The Controller**, the brains of the system, takes data from the Sentinel and informs the iBOS Display of the appropriate sequence of available batteries.

③ **The Shouter** alerts operator when the wrong battery has been selected.

④ **Real-Time Monitor** enables manager to continuously monitor battery selection activities.

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With the iBOS Real-Time Monitor, a battery room manager can use an on-site computer to continuously monitor battery selection activities. It provides information in an easy-to-understand manner, signalling the manager when one of our five alert conditions is triggered:
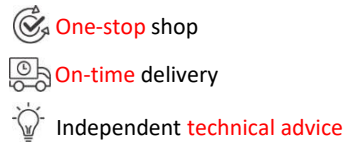
1. Battery availability low – when no charged batteries (or any number a manager chooses) are available.
2. Mis pick – when an operator chooses the wrong battery or if the battery picked is still charging.
3. Short charge duration – when a battery takes less than three hours (or any duration the manager chooses) to charge. This may indicate a low capacity battery or that an operator is returning a battery for recharging too soon.
4. Charger no start – when a charger does not turn on when a battery is connected — sometimes due to an over-discharged battery.
5. Cool down time – when a battery is picked before a pre-selected length of cool-down time, potentially reducing the life of the battery
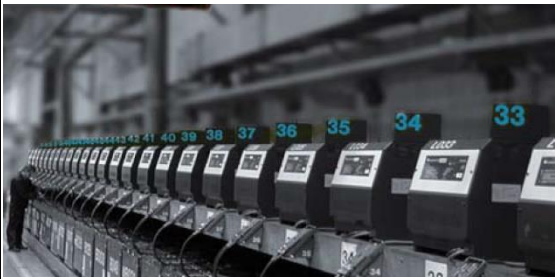
iBOS Features

• Easy-to-use "read and react" system.
• Large scrolling display tells forklift operators the "correct" battery to pick next. Displays are available in multiple languages.
• Shouter sounds an alarm when operator takes a battery that is not fully charged, reducing mis picks.
• Real-Time Monitor provides all the information needed to efficiently manage the battery pool.
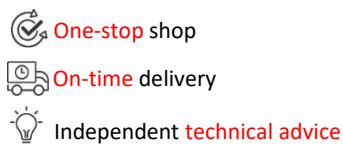• Works with virtually any charger.

iBOS Benefits

• Promotes longer battery run time and life through uniform usage.
• Improves operator productivity.
• Identifies faulty equipment.
• Helps managers decide if there are too many or too few batteries in the pool.

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iBOS Basic, Plus and Pro

	iBOS Basic	iBOS Plus	iBOS Pro
Number of Chargers	50	100	200
Number of Battery Pools*	1	9	9
Compatible with All Chargers	✔	✔	✔
Blue "Pick Light" to Indicate Correct Battery	✔	✔	✔
Universal Voltage Sentinel	✔	✔	✔
Daisy Chain Wiring with Cable Included	✔	✔	✔
Built-in Shouter	✔	✔	✔
Built-in Touch Screen	✘	✔	✔
7 Days On-Site Data	✘	✔	✔
Built-in Configuration Wizard	✘	✔	✔
Optional Web-Based Reporting	✘	✔	✔
Optional 3G Modem for Web Connectivity	✘	✔	✔
Built-in UPS	✘	✘	✔
Optional Wireless Display	✘	✘	✔
Optional Remote Shouter	✘	✘	✔

* a pool is a group of the same battery type.

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Parts included in the standard iBOS kits

iBOS Basic Kit		
Picture	**Ordering code**	**Description**
	BOS-CB6400EU	iBOS Controller, iBOS 6 Basic, 50-Chargers 1-Pool EU
	BOS-B-PCEU	IEC Power cable
	BOS-143	iBOS Extension Cable Lead & Coupler RJ12 L=8,0m/25ft • *2 pieces included in set*
	BOS-SU6000R	iBOS Sentinel 6 c/w QT & Report • *RJ12 Cable L=2,0m included* • *Quantity depends on the number of chargers (maximum 50)*

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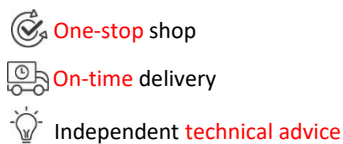
iBOS Plus Kit		
Picture	**Ordering code**	**Description**
	BOS-CB6500EU	iBOS Controller, iBOS 6 Plus, 100-Chargers, 9-Pools EU
	BOS-B-PCEU	IEC Power cable • *2 pieces (for UPS and iBOS)*
	Not available separately	iBOS Extension Cable Lead & Coupler RJ12 L=15m/50ft • *4 pieces included in set*
	BOS-200	iBOS Extension CAT6 Cable & Coupler RJ45 L=15m/50ft
	BOS-SU6000R	iBOS Sentinel 6 c/w QT & Report • *RJ12 Cable L=2,0m included* • *Quantity depends on the number of chargers (maximum 100)*
	BOS-511	Certa UPS C60/800

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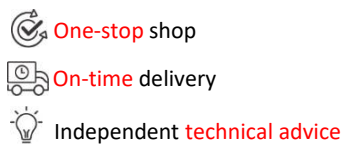
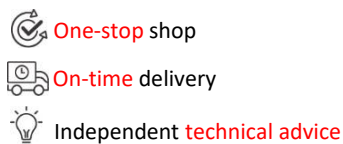| iBOS Pro Kit		
Picture	**Ordering code**	**Description**
	BOS-CB6700EU	iBOS Controller, iBOS 6 Pro, 200-Charger, 9-Pools EU
	Not available separately	Mounting bracket for IBOS Pro controller
	BOS-B-PCEU	IEC Power cable • *2 pieces (for UPS and iBOS)*
	Not available separately	iBOS Extension Cable Lead & Coupler RJ12 L=15m/50ft • *8 pieces included in set*
	BOS-200	iBOS Extension CAT6 Cable & Coupler RJ45 L=15m/50ft
	BOS-231	5-way adapter for TV driver connection
	BOS-SU6000R	iBOS Sentinel 6 c/w QT & Report • *RJ12 Cable L=2,0m included* • *Quantity depends on the number of chargers (maximum 200)*
	BOS-511	Certa UPS C60/800

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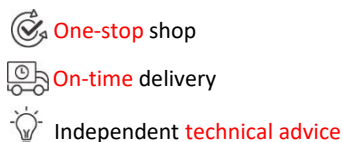
iBOS Options

Picture	Ordering code	Description
	BOS-143	iBOS Extension Cable Lead & Coupler RJ12 L=8m/25ft • *Included in iBOS Basic*
	Not available separately	iBOS Extension Cable Lead & Coupler RJ12 L=15m/50ft • *Included in iBOS Plus and Pro*
	BOS-161	iBOS Extension Cable Lead & Coupler RJ12 L=30m/100ft
	BOS-224	iBOS Sentinel Mounting Bracket, Galv. Steel
	BOS-226	iBOS Sentinel Cable Lead RJ12 L=1.0m/3ft Type 'B'
	BOS-227	iBOS Sentinel Cable Lead RJ12 L=1.5m/5ft Type 'B'
	BOS-228	iBOS Sentinel Cable Lead RJ12 L=2.0m/7ft Type 'B' • *Standard length – included in Sentinel*
	BOS-229	iBOS Sentinel Cable Lead RJ12 L=3.0m/10ft Type 'B'
	HDMI-2PS	HDMI splitter cable - 2 ports (Full HD, Passive)
For other options or extra features, please contact us		

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iBOS TV Driver – optional for iBOS Plus and Pro

Picture	Ordering code	Description
	BOS-HDS6N2	iBOS HD Next Module Sentinel 6 PLUS Panel (w/o TV Screen)*
	BOS-HDS6N	iBOS HD Next Module Sentinel 6 PRO Panel (w/o TV Screen)*

*This set includes: the HD Next Module Sentinel, Power adapter, Mouse, HDMI Cable, RJ45 Cable and RJ45 to HDMI Converter.
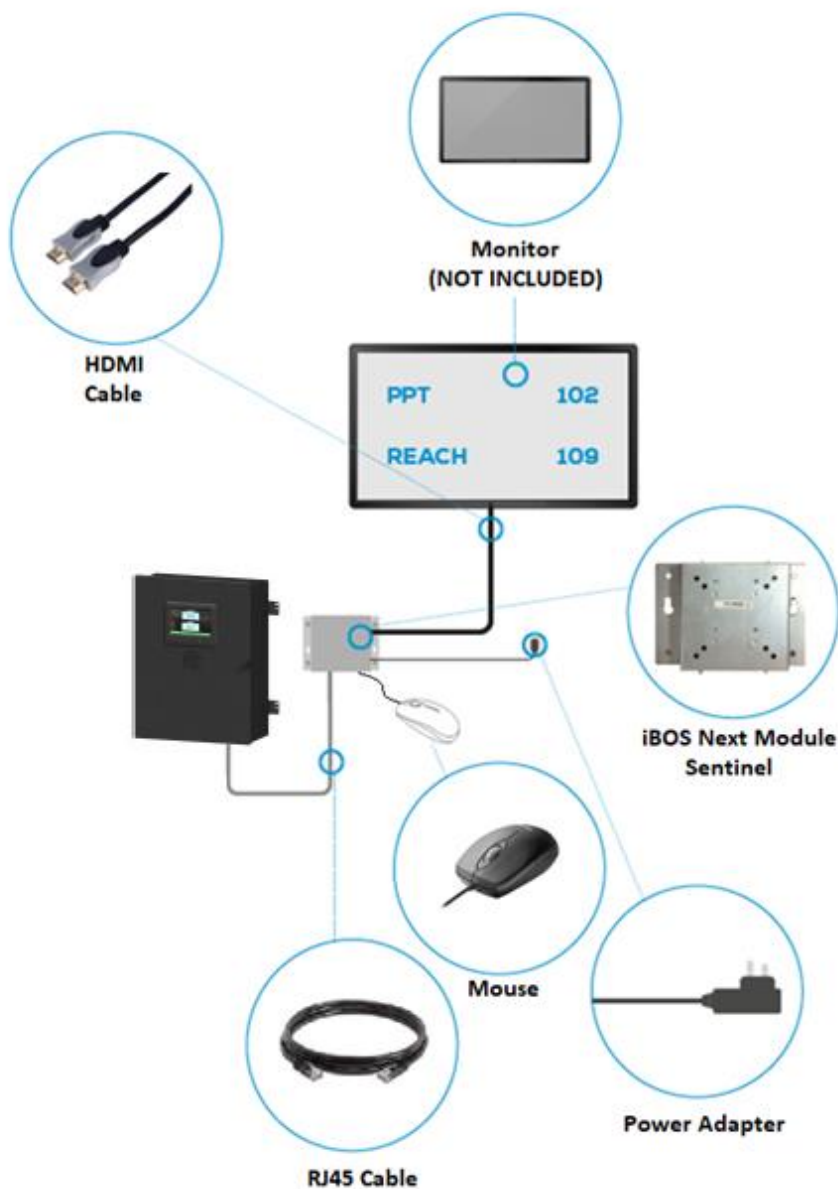
*RJ45 to HDMI Converter only applicable for iBOS Plus.

*Monitor not included. Any TV-screen or monitor with HDMI-port can be used.

Set-up TV-driver for iBOS PLus

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Set-up TV-driver for iBOS Pro

Monitor
(NOT INCLUDED)

HDMI
Cable

PPT   102

REACH   109

iBOS Next Module
Sentinel

Mouse

Power Adapter

RJ45 Cable

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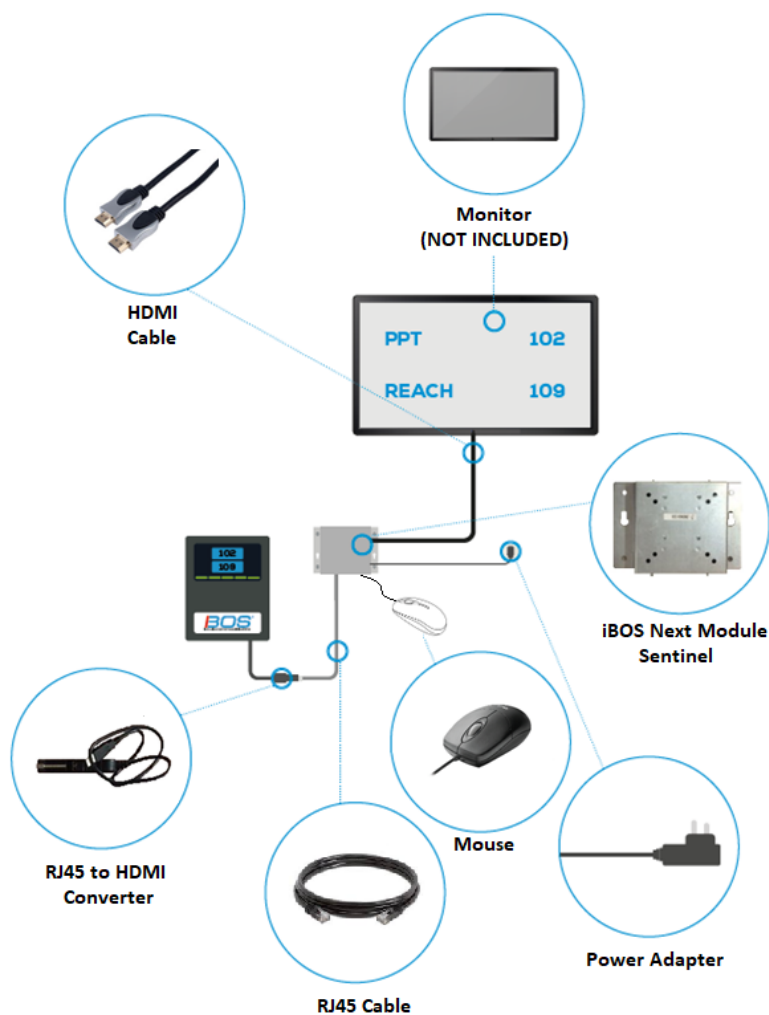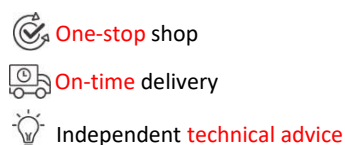
Sentinel LED status

Picture	Description
	Green LED = Communication Status: A solid green light indicates a good connection to the Controller. All Sentinels™ should have a solid green light. Upon initial connection, the green light will flash fast, then slower, before settling at solid green. If the green light remains flashing fast, check the wire connection to the Sentinel™.
	Amber LED = Charging Status: When the amber light is on, the battery is connected. If the amber light does not turn on, check the Flexi-Tap connections to ensure that the pins have fully penetrated the cables.
	Blue LED = Next Battery to Pick: A slow, blue flashing light indicated the next battery to pick in that pool. If you do not want to use the blue light as a pick light indicator, it can be turned off in the settings panel.

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iBOS World Web Service

• Enables the remote review and analysis of battery room performance — at a single facility or at multiple sites.

• Identifies faulty chargers and other equipment problems that might otherwise go unnoticed.

• Avoids disruptions to operations caused by too few batteries.

• Verifies optimum battery to truck ratio.

• Management reports give information on asset utilization and availability and proper battery rotation.

• Data is displayed in time increments specified by the user.

• Enables the analysis of long-term trends and seasonal battery usage.

• Supports energy management by facilitating off-peak charging.

• Allows management to benchmark a facility and compare its performance to other facilities.

• Access to the data is limited and controlled.

• 5 years of available data.

• Any Web browser can be used to access data.

• Saves money by helping avoid the purchase of unneeded batteries.

• Helps establish correct number of batteries needed and provides independent justification for battery and charger purchases.

• With the iBOS World™ Web Service (www.iBOSWorld.com), management can optimize assets by analysing battery performance and creating reports remotely on the Internet.

• iBOS World Web Service subscriptions are available in one-, three- and five-year plans.