



**Battery fleet
management
systems**

Solutions to keep your
productivity to a maximum



Take control of your battery fleet...

Effective fleet management of motive power batteries is one of the key functions needed to reduce operating costs in the warehouse. Multi-shift manufacturing operations, longer retail trading hours and the demand for faster logistics solutions are part of everyday business life. Keeping the materials handling equipment running, often times 24 hours a day, creates the need for streamlined battery change. Selecting the "best battery" is vital to maximising truck fleet up-time and improving profitability.

BSI40™



Battery Status
Indicator display

LIFETech®

BSI40™-Battery Status Indicator, by EnerSys®, can make managing your battery fleet straight forward and affordable. BSI40 communicates with EnerSys HF chargers and delivers accurate battery status information. The BSI40 will record and date each event, charges, alarms for each input. The user can download these files to the USB key and analyse them with the BSI40 software.

The Battery Status Indicator (BSI40) system is ideal for smaller battery fleets where effective battery rotation is business critical. Each BSI40 unit can interface with up to 160 chargers (40 chargers per panel) and can be configured to manage 1 to 10 battery families. The BSI40 unit and the stand alone display clearly indicates to the operator the best battery for the truck. This will ensure longer truck run-times between battery changes and maximise battery performance and service life.

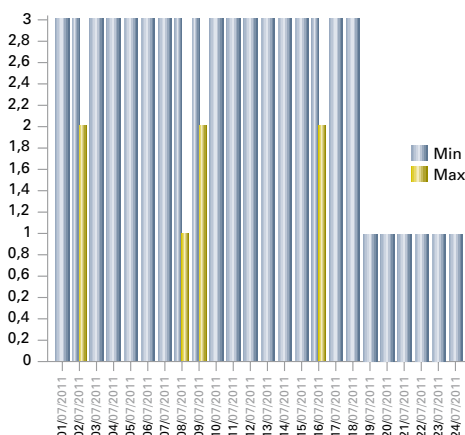
Features and benefits

- First in, first out battery rotation
- Digital display to indicate the next available battery
- Scrolling message board to display data can be located remotely
- Network up to 40 chargers to each BSI40 Panel
- 1 master & 3 slave BSI40 units can be networked to manage larger fleets & multiple families.
- Optional alarm feature to advise wrong battery selection
- Developed for use with Hawker® Lifetech® range
- Suitable for new and retro-fit installations
- Cost effective solution to battery fleet management

Management reports

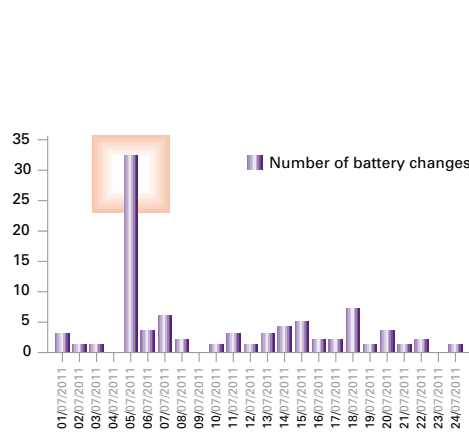
The BSI software program provides some very useful reports that helps you manage and understand the demands on your battery fleet.

Available Batteries



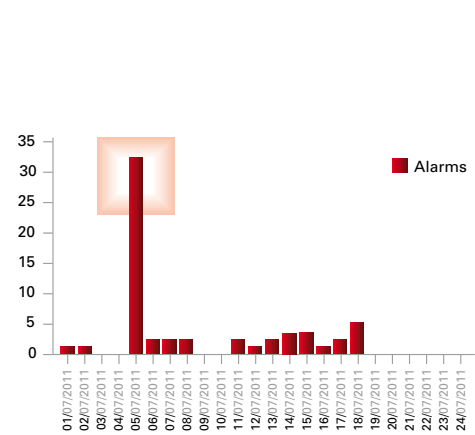
Graph showing the minimum & maximum fully charged batteries per day. This can assist in fleet planning for peak periods.

Number of battery changes



Report of battery changes per day

Alarms



Report of battery alarms or premature disconnections

LIFE Networkiq™

LifeNetwork IQ™ is the latest state of the art management system to complement new range of Life IQ™ and Lifespeed IQ™ high frequency chargers and adds some great new features for the charging room.

Using the latest technology, LifeNetwork IQ will help you derive optimum performance and service life from the battery fleet, having visibility and control of your battery charging operations. It also supports energy management by facilitating off peak charging. LifeNetwork IQ is a real time monitoring, web based software application.

Features

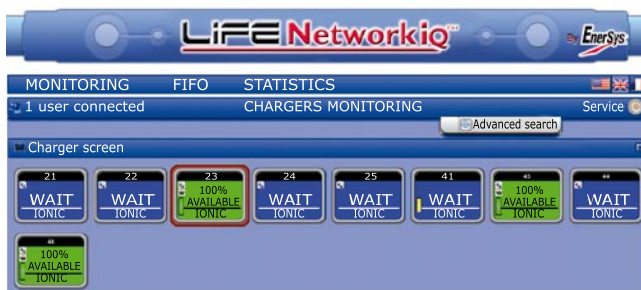
- Manage up to 10 truck/battery families
- Manage a large number of chargers
- Suite of management data and reports
- Remote access to data via LAN or internet
- Hard-wired or wireless installation
- Web based application for Life IQ and Lifespeed IQ chargers.
- Easy to install and easy to setup, running on Windows XP, Windows 7 & Vista.

Benefits

- "Best battery" allocated for each truck type
- Visibility of other fully charged batteries
- "First in, first out" Battery Fleet Management
- Remote control and visibility of all charge cycles - complete, incomplete & equalize
- Reduce battery change time
- Manage battery rotation
- Battery and charger reports received via e-mail or sms

LIFE Speed IQ™

LIFE IQ™



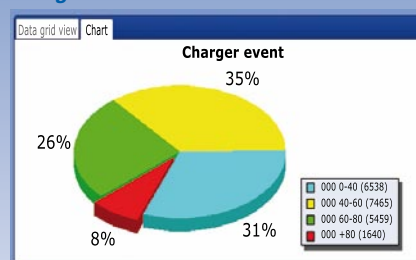
Detailed reports

LifeNetwork IQ generates 3 types of reports

Availability of batteries



Charger utilization



Faults



Additional features...

...when batteries are equipped with Wi-IQ®/Wi-IQ®2 devices

- Check status of all batteries
- Check for over-discharging
- Check for high operating temperatures
- Identify potential faults (before breakdowns occur)
- Identify which batteries require water topping up

BATTERY LIST - 01/09/2011 to 30/09/2011

Legende

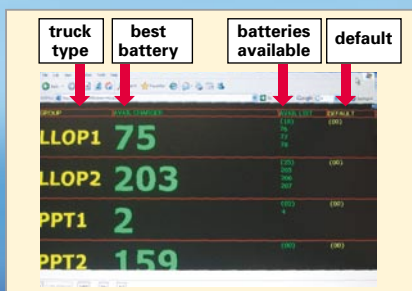
ET (%): Energy Throughput TP: Temperature OD: Over-discharge
 BA: Balance WL: Water level ME: Missing Equal
 Warning Alert

Result: 10 per page

Serial number	Fleet number	Voltage (V)	Cap (Ah)	Techno	Age (Month)	Cycle Disch.	D.O.D.	Cycle	ET (%)	TP (°C)	OD	BA	WL	ME	Last connection
1006193115-1	006	24	255	PBO	15	64	16	16	16	16	16	16	16	16	19/09/2011
1006193115-2	009	24	255	PBO	15	43	11	11	11	11	11	11	11	11	20/09/2011
1006193115-3	003	24	255	PBO	15	57	15	15	15	15	15	15	15	15	20/09/2011
1006193115-4	001	24	255	PBO	15	50	12	12	12	12	12	12	12	12	19/09/2011
1006193115-5	005	24	255	PBO	15	53	12	12	12	12	12	12	12	12	20/09/2011
1006193117-1	008	24	255	PBO	15	63	12	12	12	12	12	12	12	12	20/09/2011
1006193117-4	004	24	255	PBO	15	73	16	16	16	16	16	16	16	16	20/09/2011
1006193117-5	002	24	255	PBO	15	55	14	14	14	14	14	14	14	14	20/09/2011
1006193118-1	012	24	255	PBO	15	73	16	16	16	16	16	16	16	16	20/09/2011
1006193118-2	011	24	255	PBO	0	0	0	0	0	0	0	0	0	0	30/06/2010

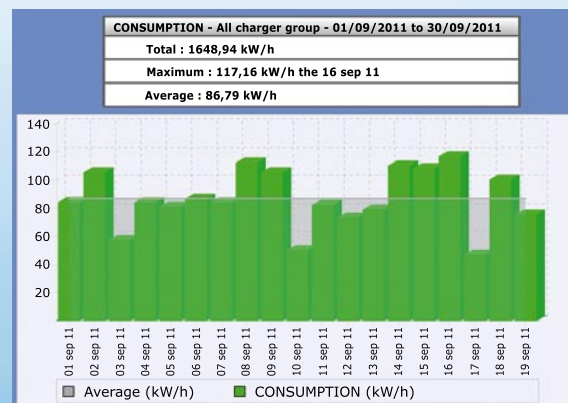
Battery room LED display

A large LED display is part of the system, and gives operators clear visibility on best battery selection and real-time information about the complete battery room operation. Different levels of access to the data can be enabled by configuring the built-in security settings.



Power Demand Management

The control of the rate at which the electricity is used, can have a dramatic impact on how much you pay. Peaks in demand above agreed thresholds generally mean large premiums. The system can be programmed to manage the total power used in a battery room and eliminate costly spikes in demand. LifeNetwork IQ™ runs on a standard PC and automatically switches chargers on and off at the optimum time to maintain electricity consumption within desired parameters. Different power thresholds can be set for certain times of the day and night – thus taking advantage of off-peak electricity rates and avoiding peak rate charges.



Remote Access

The LifeNetwork IQ program can be accessed remotely via the users LAN or internet access. This is an ideal tool for management to view 'live data' from any location whether it be an office on the same site or from a different geographical location anywhere in the world. This enables multi-site battery fleet management at the click of the mouse.



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