



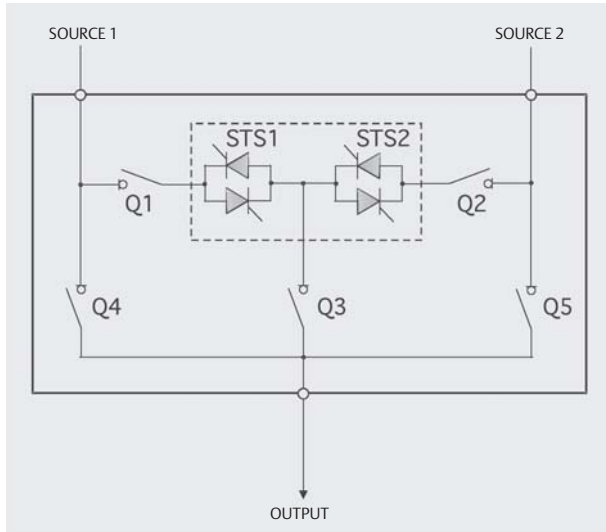
Power Quality Systems

## Liebert HiSwitch2

Digital Static Transfer Switch

## Liebert HiSwitch2

### The Cornerstone of High-Availability Power System



The new Liebert HiSwitch2, solid-state digital bus transfer switch from Emerson Network Power, is the enabling technology behind dual-bus power systems. These devices are connected between your critical load and the outputs of two independent UPS (Uninterruptible Power Supply) systems. If the primary UPS should fail, the switch will automatically transfer the loads to the surviving UPS.

Liebert is the market leader in dual & multi-bus power systems architecture, building the world's most reliable UPS and Static Transfer Switch products. The new HiSwitch2 (Digital Static Transfer Switch) further extends our market leadership with design benefits unmatched by other products.

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Liebert HiSwitch2 - Digital Static Transfer Switch

- Complete Front-Access
- Input Surge Protection
- Optional Color Touch-Screen Monitor
- Triple-redundant, Self-Correcting Logic
- Internal Dual-Bus Control Power
- Simplified Installation & Maintenance



### True Internal Redundancy

The HiSwitch2 has triple-redundant logic. Each DSP (Digital Signal Processor) controller is capable of working independently, and each helps monitor the other two. If one malfunctions, the other two lock it out. Each controller has power feeds from both power supplies.

The two power supplies feature true dual-bus power distribution. Both have dual inputs, one from each AC input source. All power connections have diode protection, so that internal or external faults cannot propagate. The result is a rugged, fault-resilient package that is optimized for real-world applications.

### True Front-Access Design

All mechanical and electronic components of the HiSwitch2 are accessible from the front of the unit. This gives you several immediate benefits:

- Greater freedom in system design. The HiSwitch2 can be placed adjacent to or in back of other equipment. It can also be placed against a wall or partition.
- Simplified installation, with ample space for cable connections through top and bottom access plates.
- Less floor space required for maintenance access.
- Simplified maintenance, with all key components visible and accessible from the front of the unit.
- 225° front door's opening angle for simplified operations

## Optional Color Touch-Screen Interface

The controls of the HiSwitch2 are intuitive and simple. The pop-up menus are easy to understand and provide a wealth of operational and diagnostic information.

This optional color LCD monitor is divided into three segments. In addition to a system mimic diagram, there is a Status/Alarm panel and a section dedicated to operator instructions and menus. You benefit from improved operator effectiveness, reduced training time, and less chance of operator error.



## Standard LED Panel

In case you need simplified version of interface, the Standard LED Panel is a good and economic solution for the customer. It is possible to monitor the unit and alert when a problem occurs by means of a series of LEDs and buttons. Both optional and standard Panel solutions can be accessed from a terminal, or a PC running terminal emulation software, that is attached to the unit.



## Liebert Experience: Greater Overall Value

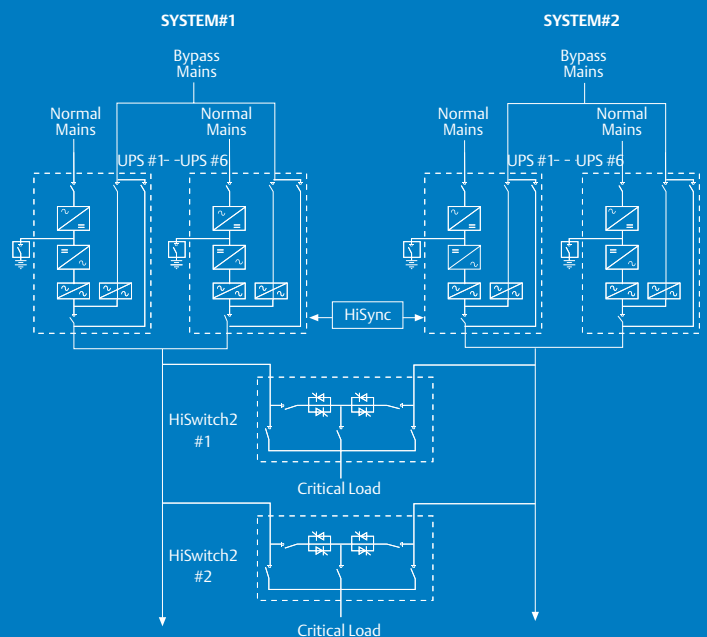
The design of the HiSwitch2 reflects our decades of leadership in critical power and environmental system architecture:

- Conservative design margins and excellent overload capacity. Can also be placed against a wall or partition.
- Designed for maintainability, with all power-train components removable and serviceable from the front, without shutting down the connected load.
- Internal CANBUS protocol: high-bandwidth communication between system components via twisted-pair cables. Options can be added as simple network nodes.
- Full range of communications options to fit any monitoring strategy for the Optional LED Panel.

The Liebert Experience means a wider variety of power system solutions from one source. Ask your Emerson Network Power representative for information about Liebert range of Power Quality Solutions.



All components are thoughtfully arranged for straight forward installation and maintenance. For units up to 600 amps, the entire power and control module can be removed as an assembly. Note the separate compartment for option modules, upper right, for safe and convenient field access.



Dual Bus System Configuration

## Technical Features [Liebert Hiswitch2]

| Rating (A) | Dimensions (W x D x H)<br>[mm] | Weight* (kg) |
|------------|--------------------------------|--------------|
| 100        | 762 x 813 x 1956               | 354          |
| 250        | 762 x 813 x 1956               | 354          |
| 400        | 965 x 813 x 1956               | 544          |
| 600        | 965 x 813 x 1956               | 544          |
| 800        | 2134 x 813 x 1956              | 1134         |
| 1000       | 2134 x 813 x 1956              | 1134         |

\* Note: Actual Weights will vary depending on installed options.



## Specifications

### Operating Specifications

Voltage: 208, 220, 240, 380, 400, 415 VAC  
(field selectable), +/- 10%

Frequency: 50 or 60 Hz (field selectable), +/- 5%

Short-circuit Withstand Capability: 100kA at 208VAC,  
from 65kA to 100kA at 480VAC (depending on the rating)

Sense and transfer time: 5ms maximum

Overload Capability: 125% for 10 minutes,  
150% for 2 minutes, 110% for 1 hour

Operating Temperature: 0 to 40° C

### Standard Features

- All components front accessible for installation and service; no side or rear access required
- Triple-redundant DSP digital logic
- Dual-redundant power supplies
- 100% rated, fuseless design
- Flash memory enables firmware updates while supporting critical load
- CANBUS internal control wiring

- Rack-out control/power assembly on units up to 600A, to allow maintenance, service, or full replacement without disrupting the critical load
- 3-pole configurations
- Top and bottom cable entry
- Dual-lug installation bus with pem nuts for single-hand installation and "hot" torque service

### Optional Features\*

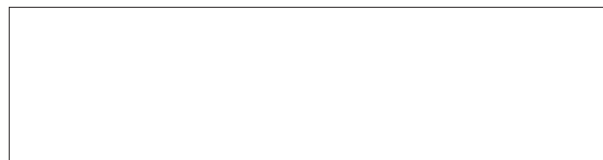
- Full range of Open Comms™ hardware and software
- Internal modem for dialing out alarms to phone or pager
- Color touch-screen LCD interface eliminates mechanical pushbuttons
- Intuitive user interface with drop-down menus and dialog boxes
- Programmable output relays for custom customer alarms and connections
- Customizable input relays allow alarms from other devices to be displayed on HiSwitch2 display

\* Compatible with LCD Panel only

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