

assured power

## Assured **Redundant Power** for mission critical applications.



Enhance, extend, and optimize power to your critical security infrastructure with **Helix Armour<sup>™</sup>** an award winning family of redundant power management solutions that maximizes operational reliability while reducing costs and minimizing risks.

**Uninterrupted power** - Delivers AC or DC power redundancy and resiliency for a variety of power requirements.

**Proactive management** - ensures operational excellence with network reporting to maintain required levels of performance, reliability, and availability to critical applications.

**Seamless fail-over protection** - Intelligent monitoring reacts to power failures with automatic backup switchover with zero latency to maintain uninterrupted system operation.

**Protecting your investment** - HELIX Armour<sup>™</sup> power redundancy provides the ultimate insurance against failure of your mission critical security systems.

## maximum protection for critical infrastructure



**Active duty 24/7** - HELIX ARMOUR utilizes patented LifeSafety Power NetLink<sup>®</sup> technology to detect and report system anomalies. Trouble with power, batteries or connected devices are reported to multiple users so critical infrastructure can be properly secured.

**Industry recognized reliability** - HELIX ARMOUR DC redundant systems carry multiple UL listings and are the go to choice for assured protection in government, finance, medical and technology verticals.

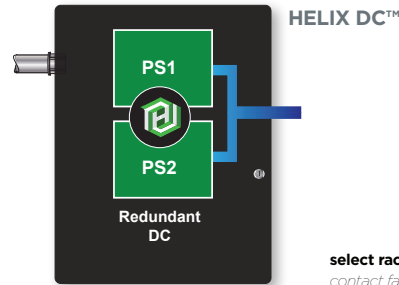
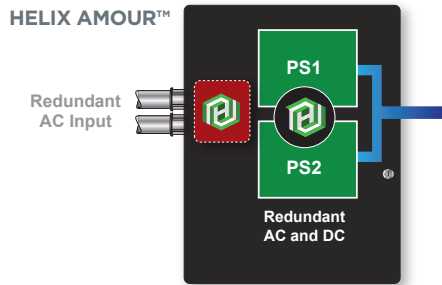
**AC assurance** - HELIX AC utilizes and monitors two ac branch circuits. Trouble to a primary branch instantly switches power to the back up branch to maintain uninterrupted AC operation.

Applications for redundant A+B ac power include:

- Power to critical Access or Security Systems
- Banking, Gaming, Pharmaceutical, SCIF, Data Centers

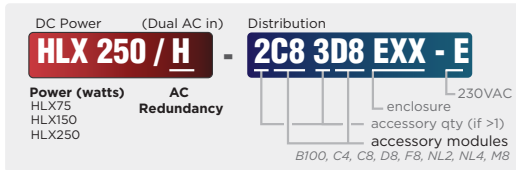
**DC reliability** - Configurable mirrored power supplies monitor and report DC integrity. If a power system fails, HELIX DC safely transfers operation to the secondary power system without any voltage or current disruption.

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**select rackmount configurations available**  
 contact factory

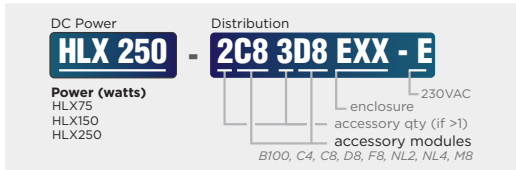
**HELIX ARMOUR™ AC & DC Model Configuration**



Redundant AC & Redundant DC System			
Input	Output**	Model No.	Outputs
120 VAC	12V or 24V	HLX150/H-NL4E2	1
	12V or 24V	HLX150/H-D8NL4E2	8
	12V or 24V	HLX150/H-2D8NL4E2	16
208/230 VAC	12V or 24V	HLX150/H-NL4E2/E	1
	12V or 24V	HLX150/H-D8NL4E2/E	8
	12V or 24V	HLX150/H-2D8NL4E2/E	16

\*\*User sets either a 12 or 24V output

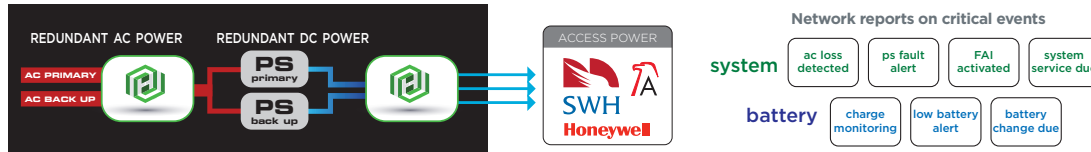
**HELIX DC™ Model Configuration**



Redundant DC Wallmount System			
Input	Output**	Model No.	Outputs
120 VAC	12V or 24V	HLX150-NL4E2	1
	12V or 24V	HLX150-D8NL4E2	8
	12V or 24V	HLX150-2D8NL4E2	16
208/230 VAC	12V or 24V	HLX150-NL4E2/E	1
	12V or 24V	HLX150-D8NL4E2/E	8
	12V or 24V	HLX150-2D8NL4E2/E	16

\*\*User defines output voltage

**HELIX™ Mission Critical Protection**



**HELIX GENERAL SPECIFICATIONS**

<b>INPUT</b>	Input 120VAC / 230VAC 50/60 Hz	<b>BATTERY CHARGING</b>	Independent built-in lead acid battery charger
	Thermal overload protection		Dual rate charging of 12 or 24V battery sets
	Short circuit protection		Auto transfer to battery when AC fails
<b>OUTPUT</b>	DC1 continuous output	<b>AC SUPERVISION</b>	Management of AC line (C/H models)
	120 mV output voltage ripple		120 mV output voltage ripple
	Power distribution: user defined		Power distribution: user defined
<b>INTERNAL PS INDICATORS</b>	AC input and DC1 output	<b>DC SUPERVISION</b>	Power Supply, battery sets, external temperature
	System and AC Faults		Email, SNMP, XML reporting
	Ground fault, reverse battery		
<b>EXTERNAL INDICATORS</b>	AC On	<b>AGENCY LISTING</b>	UL294, UL603, UL1076, ULC S318, S319 CSA C22.2 #107.1 / CSA 22.2 #60950 CE
	Distributed outputs		

**HELIX NOTES**

Due to the nature of the Helix system architecture and its intended applications, the limitations and conditions of installation of the Helix system must be fully understood by the system planner & installer. Thoroughly read the Helix installation manual before using a Helix power system.

**Redundancy**

Helix adds a layer of AC and DC redundancy over a typical single FPO power supply system. In a HELIX configuration only the FPO power supply is redundant - any power distribution in the system is not redundant. Also, the Helix cannot overcome any problems in the field wiring or load devices - if a short circuit shuts down the main supply, the backup supply will also be shut down by this short circuit.

**Backup Battery**

PS2 must have battery backup connected for proper operation. A battery should not be connected to PS1 - this is to prevent cycling between PS1 and PS2 during battery discharge on loss of AC.

**Fault Contacts**

The fault contacts of BOTH FPO power supplies must be monitored to annunciate failure of either power supply. The fault contacts may either be monitored separately or series/paralleled as needed for a common fault indication.