

Industrial Static Control

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# IQ Power HL

STATIC NEUTRALIZING SYSTEM  
FOR HAZARDOUS LOCATIONS



# IQ Power HL

## Our Most Intelligent Static Neutralizing System for Hazardous Locations

The IQ Power HL System is our most innovative static control system designed to optimize static neutralization in hazardous locations where safety is a concern.

A scalable system consisting of a Control Station, Static Neutralizing Bar, Power Supply, Sensor, and a Sensor Interface, the IQ Power HL ensures exceptional ionization performance within Class1, Div. 1, Group D classified areas.



### Control Station

The Control Station is the central monitoring device that allows control over the whole static neutralizing system. It has a large color touch screen interface that displays a complete status of up to 10 neutralizers with sensors.

The Control Station provides details including device name, status, output and current. Sensor data is also shown for operator safety and verification.

Data logging capabilities are offered with user selectable time intervals in addition to event logging.



### System Advantages

- Connects up to 10 neutralizers—each with up to 8 sensors
- Patented CLFB with charge sense technology
- Patented Auto-Tune technology
- Patented dual-axis control
- Patented one-touch, self-calibration
- Patented HV power supply connector system
- Sensor uses digital technology with no EMI
- User-controlled warnings and alarms
- Fully serviceable modular system
- Customizable data logging and retrieval
- Full PLC integration

The Control Station provides four Output Modes of operation to manage the output ionization:

- **Fixed Mode** for system optimization based on standard charge conditions.
- **Auto-Tune Mode** a patented feature for optimization based on varied charge conditions.
- **Manual Mode** for user adjusted output settings.
- **Closed-Loop Feedback (CLFB) Mode** allows Sensors to dynamically adjust the output of the power supply resulting in optimized static neutralization.

The Control Station features upstream and downstream charge readings when used in conjunction with the Sensor. Output modes are configurable per Sensor.

## Static Neutralizing Bar

The IQ Power Static Neutralizing Bar is highly efficient with 100% effective length and built for long lasting durability with little maintenance. Each individual ion emitting pin is current limited to eliminate the risk of hazardous electrical shock and explosion in specific classified areas. They are offered in over 85 different lengths and two varieties to suit your application based on the web speeds or operating distance. Neutralizing bars include rugged mounting hardware.

- **Speed Static Bars** are engineered to neutralize static charges on webs traveling up to 3,000 fpm and are mounted approximately 4" from the material to be neutralized.
- **Hybrid Static Bars** are designed for installations where the web path is somewhat variable. Typically mounted up to 18" away.



## Power Supply

The IQ Power HL System offers two power supply choices. They provide high voltage output power and process system intelligence to maintain and communicate complete static control. Features include auto-calibration and dual-axis feedback control.

- The **HL Power Supply** is approved for mounting outside the hazardous area. Indicators on the HL Power Supply display system status, power, service status, and fault conditions.
- The **HLC Power Supply** is a cast aluminum enclosure approved for mounting inside classified hazardous locations. It requires a **Remote Display Monitor**, mounted outside the hazardous area, to display all critical indicators such as service status and fault conditions.



## Sensor & Sensor Interface

**IQ Power Sensors** are intrinsically safe active modules that are easy to install without the use of conduit. In conjunction with the IQ Power HL Static Neutralizing bars, Sensors in CLFB mode allow the power units to adjust in real-time to ensure the material has the lowest possible residual charge. They can be installed upstream or downstream from the neutralizing bar. Additionally, they can be used as a stand-alone monitoring system. The Sensor incorporates digital technology, offering superior signal transmission and is impervious to noise. Annual calibration is recommended.



The Sensors allow for numerous sensing ranges and flexible mounting distances. Each Sensor must be installed through a pair of intrinsic safety barriers to maintain hazardous location approval.

The **IQ Power Sensor Interface** acts as a gateway between the Sensors and the Control Station. It is mounted outside of the hazardous location and connects up to 8 Sensors. Fault and warning status indicators are shown per Sensor.

The Control Station displays individual Sensor readings. Additionally, the Control Station allows for control over the Sensor output mode, as well as setting both alarm thresholds.

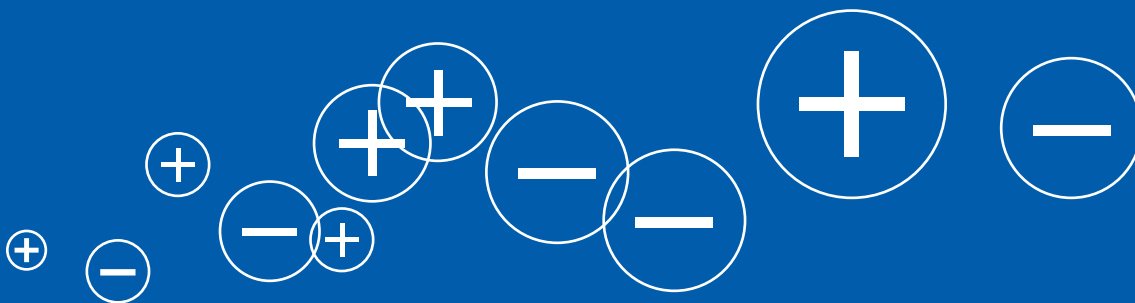
DEVICE_1	Web Voltage Sensor 1	+ 0.3 kV
	Web Voltage Sensor 2	+ 0.8 kV
	Web Voltage Sensor 3	- 0.2 kV
	Web Voltage Sensor 4	- 0.5 kV
	Web Voltage Sensor 5	- 0.7 kV
	Web Voltage Sensor 6	+ 0.3 kV
	Web Voltage Sensor 7	+ 0.9 kV
	Web Voltage Sensor 8	+ 0.5 kV





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