

IQ POWER

STATIC NEUTRALIZING SYSTEM
WITH SENSOR TECHNOLOGY

Industrial Static Control

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An ITW Company



IQ Power

Our Most Advanced Static Neutralizing System

Designed for use in a wide array of industrial applications and leveraging many patented features, the IQ Power system combines exceptional ionization performance and ultimate monitoring intelligence with user-friendly functionality.

This fully integrated scalable system makes installation a snap. There is no complicated software to install and our “smart addressing” technology and flexible mounting options make this system and its components easy to add to any existing application.

The IQ Power system can connect up to 10 neutralizing or sensing devices. It is also available for hazardous locations including Class 1, Div 1, Group D classified areas.



Estación de control IQ Power



Barra de sensores IQ Easy



Barra de estática IQ Power con fuente de energía BPS

Barra de estática IQ Easy LP



System Advantages

- Plug & play scaleable system
- Patented CLFB mode allows the Sensor bar to control output of neutralizing bar
- Patented Auto-Tune technology
- Patented Dual-Axis control
- Patented One-Touch calibration
- Patented Power Supply connector system
- User controlled voltage alarms
- Standby Mode for pausing ionization
- Customizable data logging and retrieval
- Full PLC integration
- Auto-addressing of connected devices

Static Neutralizing Bars

Unlike older technology bars, static neutralizing bars in the IQ Power family are highly efficient with 100% effective length. These high output neutralizing bars are shockless, DC powered and built for long lasting durability with low maintenance.



IQ Power Static Bar

The **IQ Power Static Bar** is offered with Tungsten emitter pins which are the most durable and available with our speed, hybrid and distance bars for all operating conditions.



IQ Easy LP Static Bar

The **IQ Easy LP Static Bar** is engineered to be the most compact and powerful ionizing bar with built-in high voltage power. Its high output power allows it to achieve the lowest possible residual charges in a wide range of applications.

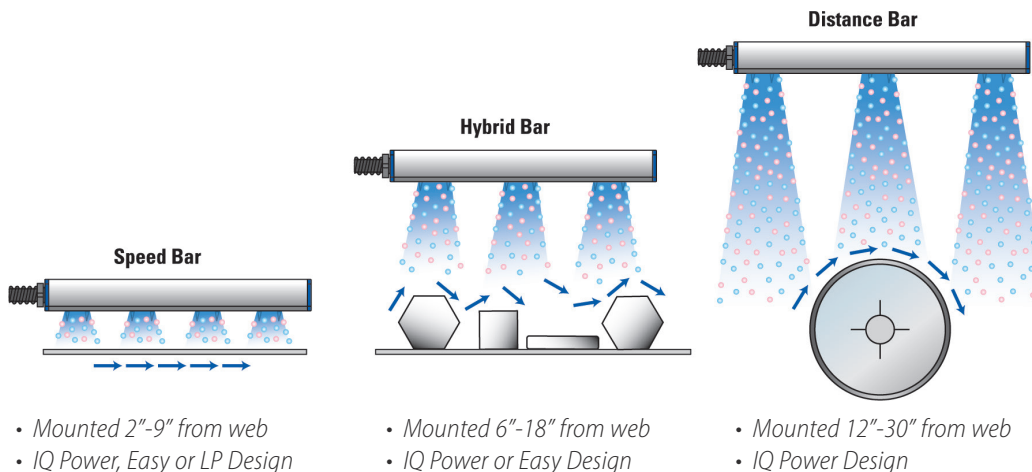


IQ Easy Static Bar

The **IQ Easy Static Bar** has a built-in high voltage power supply that requires only a low voltage input of 24 VDC, allowing for a safe and clean install. It is IP-66 rated for protection against particulate and splash.

The IQ Power neutralizing bars are offered in over 85 different lengths and three types to suit your application based on the web speeds or operating distance.

- **Speed/LP Bars** are engineered to neutralize static charges on webs traveling up to 3,000 fpm and are mounted up to 9" away from the material to be neutralized.
- **Hybrid Static Bars** are designed for varied installations up to 18" away.
- **Distance Static Bars** are engineered to provide powerful ionization for distances up to 30 inches away in applications where installing a static bar close to the web is not an option.



Power Supply

The patented **BPS Power Supply** provides one touch calibration and visual indicators for output readings, power, clean bar, fault and communication. The BPS is compatible with IQ Power Speed, Hybrid and Distance bars. Simple device installation with the IQ Power Wireless Link. Eliminate costly and time-consuming wiring. Using Industrial Bluetooth, the **IQ Power Wireless Link** provides a straightforward and effective way to maintain constant contact without the inefficiency and expense of long cable runs.



Control Station

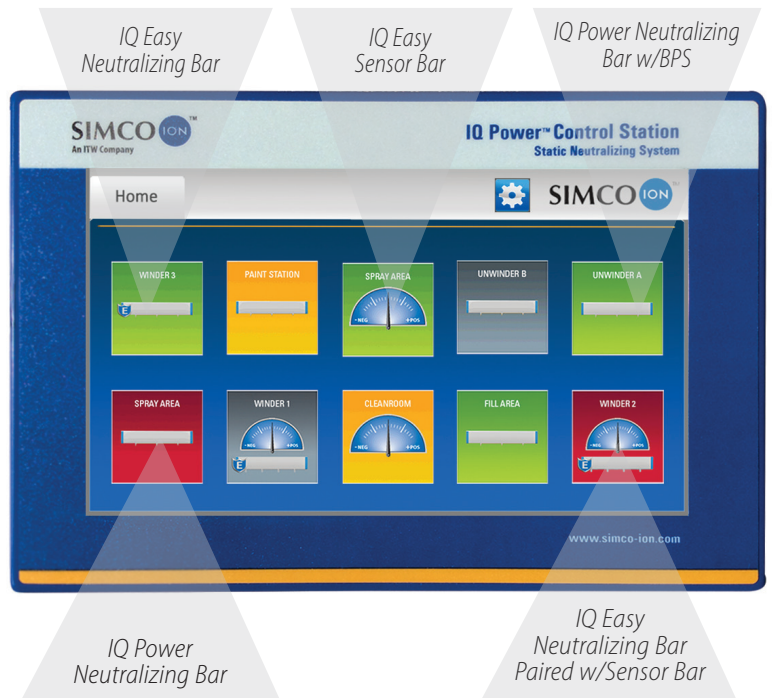
The Control Station is the central monitoring device of the IQ Power System. It includes a 10 inch full-color touch screen with an intuitive interface and user-friendly features that help you monitor and control the system globally or by device.

The Control Station provides device operating details including user defined name, status, ionization output, current and global alarm thresholds for both warning and fault, all of which can be displayed indefinitely with a lock screen feature. A bootloader feature enables reprogramming of hardware in the field and a diagnostic screen provides feedback on product and fieldbus connections.

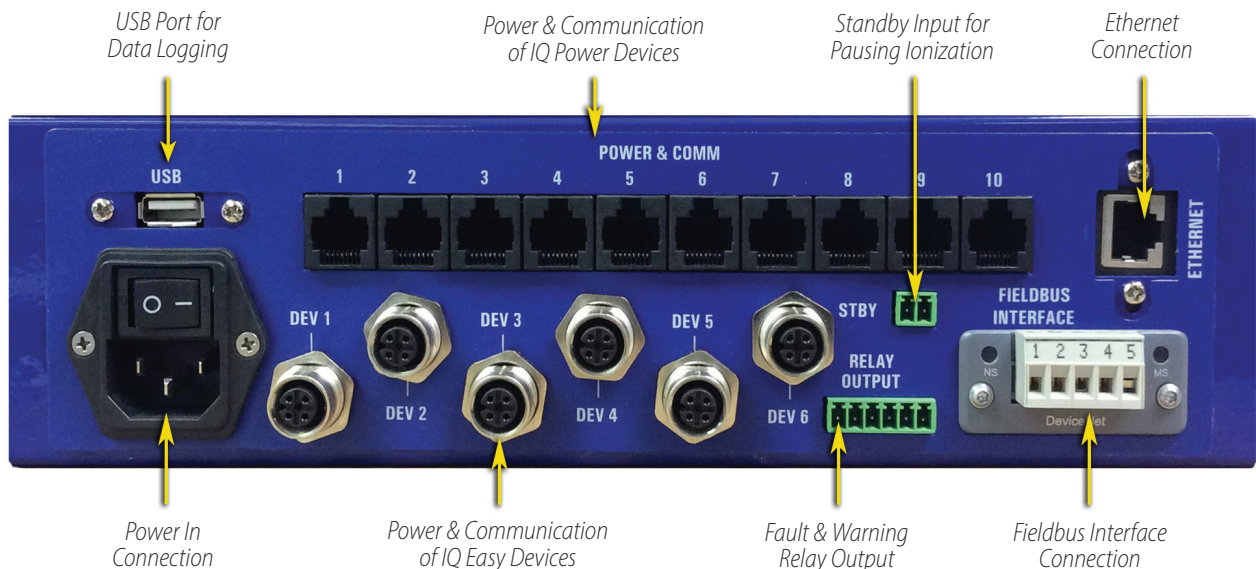
Our "Smart Addressing" automatically assigns addresses to devices as you add them to the system, eliminating the need to manually adjust parameters for each device.

Color coordinated icons and output readings are designed to notify the operator of the device status. Instant, live operating conditions of all connected neutralizing and monitoring devices are available.

- Device is operational and running effectively.
- Device/parameter warning for cleaning or has exceeded alarm level.
- Device/parameter fault or has exceeded the alarm level.
- Device is disconnected or device is in Standby Mode: pauses ionization during equipment inactivity allowing for immediate restart.



Control Station Connections

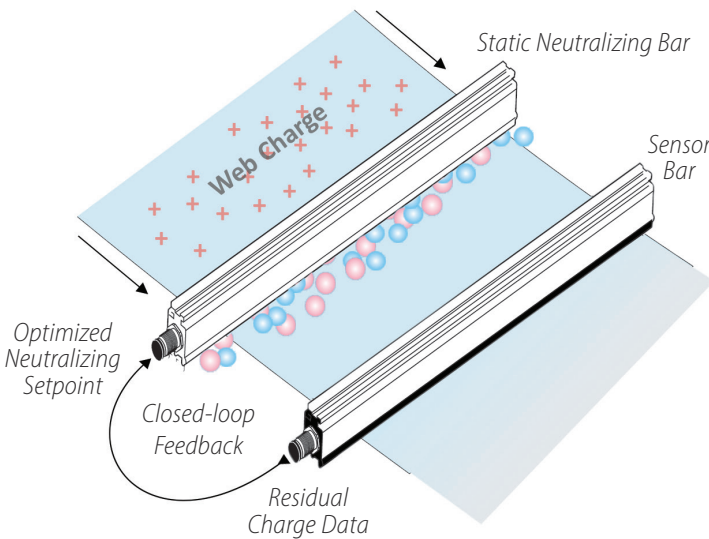


Control Station Output Modes

The Control Station provides four Output Modes of operation to manage ionization, providing the best results based on your application.

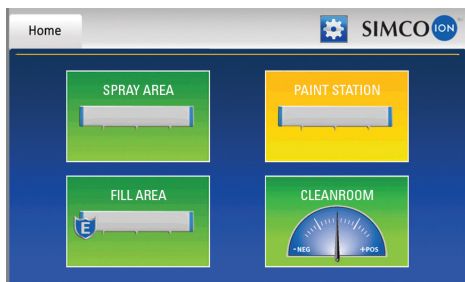
- **Fixed Mode** for system optimization based on standard charge conditions.
- **Auto-Tune Mode** a patented feature for optimization based on varied charge conditions.
- **Manual Mode** for user adjusted output settings.
- **Closed-loop Feedback (CLFB) Mode** allows the Sensor bar to directly control output of the neutralizer. CLFB mode offers the most precise static neutralization.
- **Balance Mode** allows manual control of ion balance.
- **Pulse Mode** allows for adjustment of the pulse time and pulse overlap. Provides static neutralization at moderate distance in stationary and slow-moving environments. Pulse mode is available with the IQ Easy LP Bar and provides static neutralization at moderate distance in stationary and slow-moving environments.

Summary Neutralizer	
SPRAY_AREA OK Page 1/3	
Device Name	SPRAY_AREA
Bar Type	Speed
Operation Mode	Fixed
Bar HV	ON
Ion Output	100%
Balance	[+ 50/50 -]



Neutralizing Bar Readings

The Control Station's home screen icons change based on the amount and type of connected devices. Below are examples of the information displayed when a neutralizing bar is connected to the system.



The Home screen displays icons for each device. Icon color represents device status. For Example, four various devices are connected.

Summary Neutralizer	
SPRAY_AREA OK	
Device Name	SPRAY_AREA
Ion Output	100%
Operating Mode	Fixed
Ion Current	+124 uA -128 uA
Web Speed [DEVICE]	500 FPM (152 m/min.)

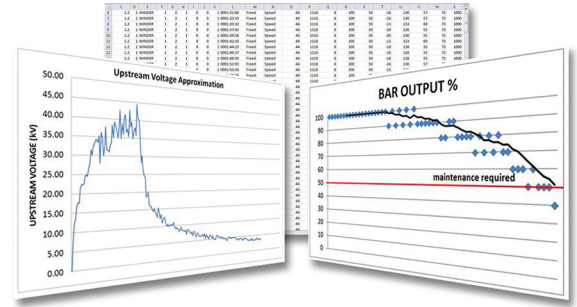
The Summary screen provides the most important device information such as name, ion output/current, operating mode, and web speed.

Summary Neutralizer	
SPRAY_AREA OK Page 1/3	
Device Name	SPRAY_AREA
Bar Type	Speed
Operation Mode	Fixed
Bar HV	ON
Ion Output	100%
Balance	[+ 50/50 -]
Upstream Cal.	OFF
Downstream Cal.	OFF

Device screens provide more detailed information such as address, bar/web width, web speed, mounting distance, and run time.

Data On-Demand

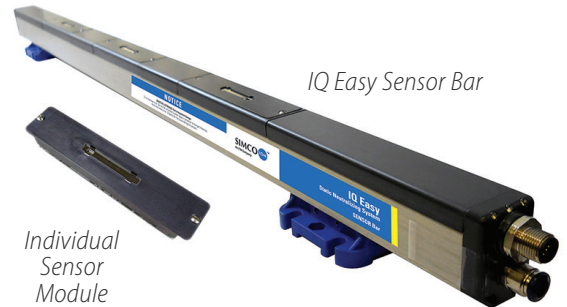
Static can be an invisible threat, therefore having charge information at your disposal is sometimes required for quality verification. The IQ Power Control Station combines data logging with user selectable time interval data points in addition to automatic logging of warning and fault conditions. Data retrieving methods are made simple via USB FTP. The IQ Power Control Station provides an optional fieldbus interface connection allowing for full PLC integration, various protocols are available.



Sensor Bar

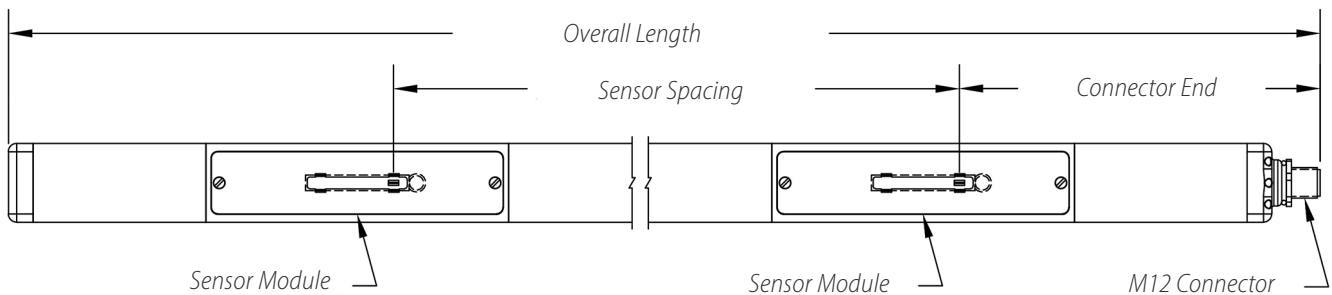
IQ Easy Sensor Bar is an active multi-point sensor bar that offers real-time, calibrated, digital stand-alone monitoring or closed-loop feedback functionality that work in conjunction with our static neutralizing bars. It adjusts as needed in real time to ensure you are receiving the lowest possible residual charge.

The unique design allows for various configurations, giving you the ability to position the sensors at the edges and middle of the target to receive a complete understanding of any electrostatic charge issues unique to your application.



- Full web width charge monitoring
- Use for either static elimination or charging applications
- Monitor static charge before or after any static device or process value add
- Configurable to mount up to 10" from target

- Air purge for optimal cleanliness and accuracy
- Individual sensor readings
- User selectable specific sensors for closed-loop feedback
- Over 40 bar configurations available



Sensor Bar Readings

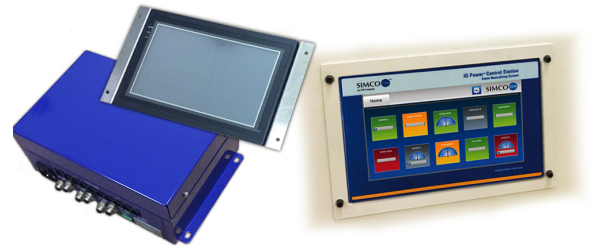
Overall average and individual sensor readings are available via the IQ Power Control Station. Data from each individual sensor can be used to generate fault or warning conditions. Sensor attributes such as run time, CLFB adjustments, and address are also viewable.

CLEANROOM	
Device Name	Cleanroom
Sensor Quantity	3
Mounting Distance	4.0 in. (101 mm) 30kV range
Warning Setpoint	2.5 kV
Fault Setpoint	20.0 kV
Overall Average	-0.5 kV

CLEANROOM	
Web Voltage Sensor 1	+1.5 kV
Web Voltage Sensor 2	-1.3 kV
Web Voltage Sensor 3	-1.7 kV

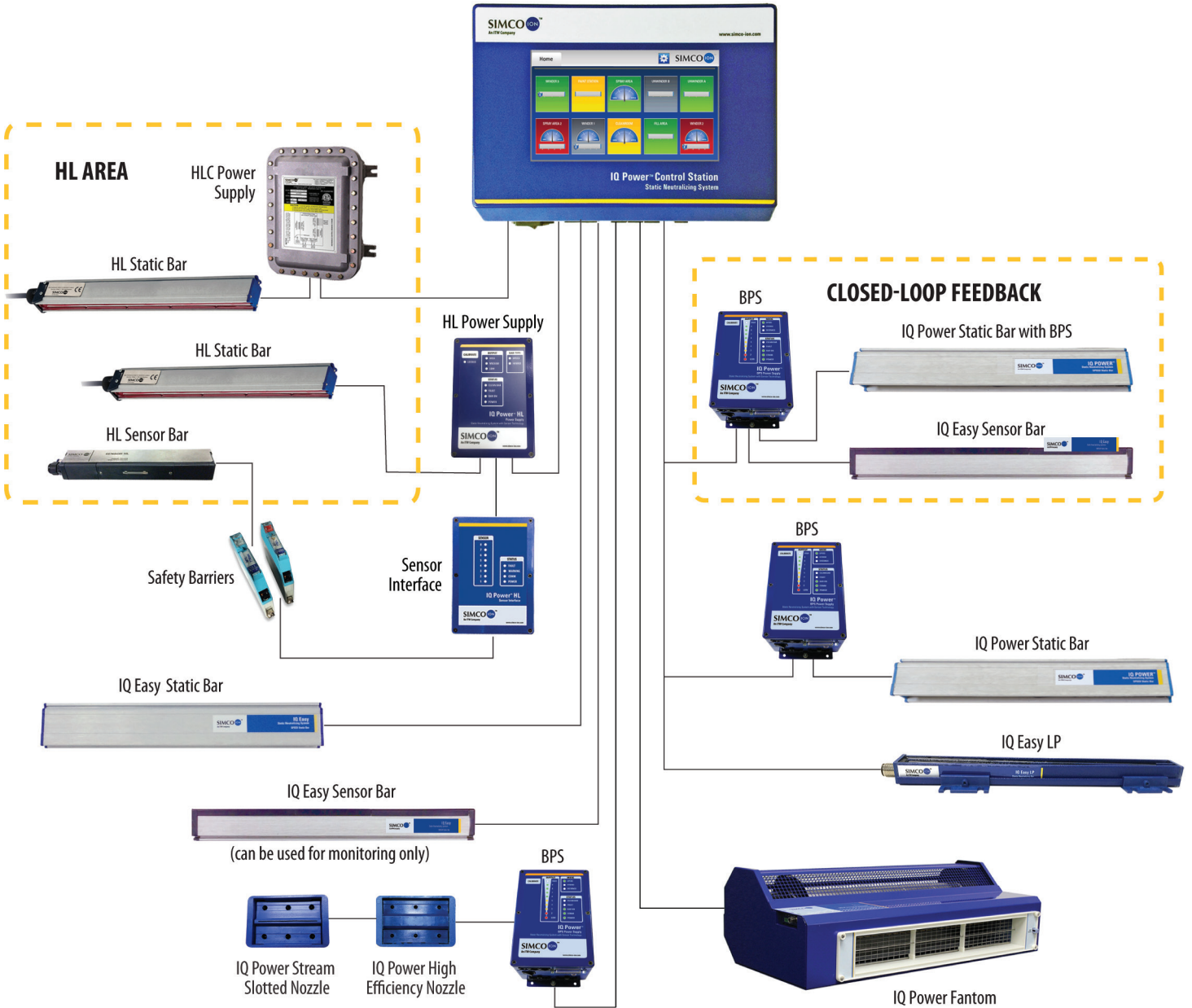
Control Station Mounting

The Control Station offers flexible mounting options. For installations with limited space, the display can be easily rotated, changing the exit point of the connections. Additionally, the Control Station can be remote mounted up to 10 feet away to conveniently fit within your existing equipment.



IQ Power System Network

The IQ Power System can power and monitor up to ten devices in one complete network through the Control Station. Devices are powered through the control station at 24 VDC input power. When used in standalone mode, devices are powered using an AC adapter.





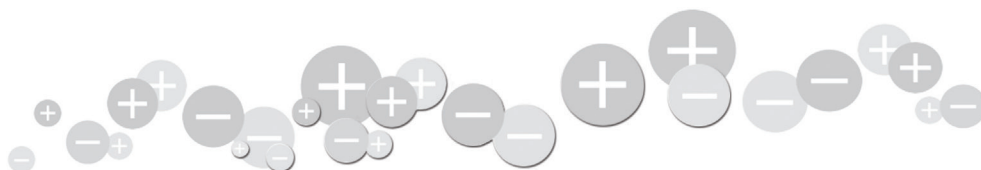
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