



March 2021

### **Static Control**

Advanced 24V Technology





# All about Meech

Established in 1907, Meech International is one of the world's leading manufacturers of static control, compressed air technology and web cleaning systems, both contact and non-contact.

The company has its headquarters in Oxfordshire (UK), with subsidiaries in the USA, Belgium and China, and offices in Hungary, India and Singapore. These offices are backed up by a distribution network and together operate in over 80 countries. Meech products are used in a vast range of industries including:

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Aerospace	Medica
Automotive	Packag
Beverage	Pharma
Converting	Plastics
Food	Printing

Meech has specialised in industrial electrostatic control for over 50 years. This experience has led to R&D that matches changing customer needs. Meech pioneered the industrial use of pulsed DC technology for static control and now has thousands of systems installed in the plastics, converting, printing and packaging industries.

Static electricity is most commonly caused by friction, pressure or separation, with examples ranging from the unwinding of plastic film to everyday shocks from cars and door knobs.

Unchecked, static electricity can cause productivity, quality and safety problems throughout industry. Electrostatic attraction or repulsion generates dust contamination and product misbehaviour and an electrostatic discharge can shock operators, start fires and destroy electronic components.

Meech provides solutions to control static in virtually every production situation. The product range includes ionising bars, blowers, guns and nozzles, as well as ionising air curtains, <u>power supplies</u> and test & measuring equipment.

# We've got the world covered

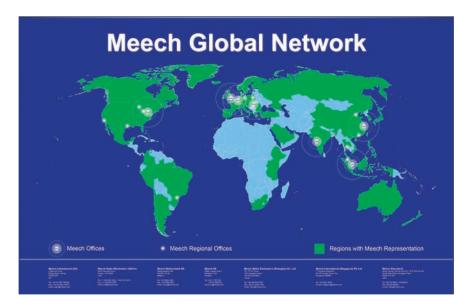
Wherever you are in the world you'll find Meech hard at work, providing a wide range of businesses with specialist expertise. From the headquarters and technical centre in the UK, our manufacturing subsidiary in the USA to the sales and marketing offices in Belgium, Hungary, China, India and Singapore we've got the world covered. Our global network of distributors are carefully selected, fully trained and on call to provide in-depth technical support – wherever you're based.

# Outstanding quality as standard

Quality is at the heart of every Meech system. We always work to the highest possible quality standards in everything we do: manufacturing, customer support and technical know-how. Our quality management system is certified by BSI to ISO9001. Products manufactured by Meech are also appropriately certified to international standards which include CENELEC EN 60950, UL/CSA (CUL) and CE. We also hold ATEX and UL"EX" approvals for use in hazardous environments. So, you can be sure you've chosen a solution and a company that will meet your own exacting standards.

# All the experience you need

Meech has been at the forefront of innovation within the industry, earning a worldwide reputation for consistently designing, manufacturing and marketing products that offer unparalleled performance and technical superiority. This experience and reputation has helped grow the global user list which now includes companies like: 3M, Amcor, Avery Denison, BP, Bruckner Group, Ford, GlaxoSmithKline, Honda, Nestle, Nissan, Procter&Gamble, RPC Group and Tetra Pak



Meech

"Over the past nine months the static bars have proven to be more than efficient, so I can say we've been very satisfied with both the quality of the equipment and the service provided. We're confident that this installation will only benefit further the relationship between RPC and Meech." Technical and Development Manager, RPC

"We are very pleased with the results obtained. We managed to solve the problem existing in our production plant quickly; the feedback system manufactured by Meech guarantees the smooth running of the whole production process, and the products leaving our factory are of the world's highest quality" *Process Engineer, 3M* 



# **HYPERIGN**<sup>TM</sup> A Meech Innovation

The Hyperion Static Control range from Meech, includes lonising bars, generators and controllers. Offering unparalleled performance these revolutionary products have been developed in conjunction with distributors and end users in an effort to provide a powerful and flexible static control solutions. Key characteristics of the range include Current Monitoring (ICM), Clean PIN Alert and adjustable output voltage, frequency and balance.

### Hyperion Bars

In the past the majority of ionising systems have required a 110/220V AC mains input to the power supply and then high voltage cabling to the ioniser. However, over time demand for 24V DC powered devices has increased significantly.

Meech has unrivalled knowledge of industrial pulsed DC systems. Historically used for mid to long range applications, pulsed DC ionisation is powerful and flexible, making it ideal

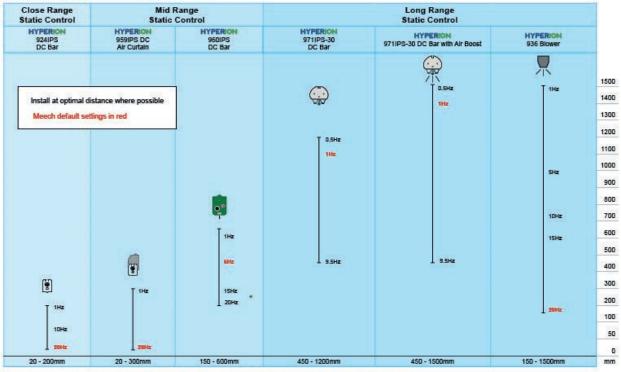
for today's modern fast moving equipment.

There is also a growing demand for compact ionisers to fit into small spaces. Typically, this has required AC ionisers. These need to be fitted close to the application and offer little flexibility or control.

In answer to these two demands Meech has developed the Hyperion range. Hyperion bars are designed to provide all the power, flexibility and features of a pulsed DC ionising bar combined with the compact dimensions and performance of an AC ionising bar.

Meech are one of the only manufacturers to provide dedicated pulsed DC products for short, mid and long range ionisation. A chart highlighting operating distances is below.

#### Typical Operating Distances of Meech Hyperion Static Control Equipment\*



Product shows in this document may be sovered by one or more patients, patients applied for and/or regulated designs and/or trade marks. For farther into markets please refer to our Head Office or viell wave meech con.

### Hyperion Bar Feature Comparison

FEATURE	924IPS	960IPS	971IPS-30
Optimum Working Distance	20-200mm	150-600mm	450-1200mm (1500mm with air boost)
Dimensions (W x H)	22 x 32mm	30 x 45mm	63 x 70mm
Maximum Length	3960mm	3900mm	4050mm
Weight (per meter)	0.5kg	0.9kg	1.2kg
Construction	ABS Plastic FR	ABS Plastic FR	ABS Plastic FR
Mounting	'T' Slot with M4 x 20mm studs	'T' Slot with M4 x 20mm studs	'T' Slot with M4 x 20mm studs
Shockless Titanium Emitters	$\checkmark$		
Replaceable Emitter Pins	×	×	✓
Low Voltage Wiring	24V DC (21-27V DC)		
Output Voltage	+/- 3 to 7.5kV pulsed DC Adjustable	+/- 15kV Pulsed DC Range: 2kV – 15kV Adjustable	+/- 30kV pulsed DC
Adjustable Frequency	1Hz to 20Hz		0.5Hz to 9.5Hz
Adjustable Balance	80:20 To 20:80 Pos:Neg		
Clean Pin Alert and fault alerts	✓		
Integrated Power Supply (IPS)	✓		
Environmental Protection	IP66	IP66	IP64 or IP65
Output Signal	$\checkmark$		
Divider	✓		
Air Assist available	×	×	Integrated

"The Meech systems now enable us to run our rewinding machines at twice the previous speed and have eliminated potential quality problems. Time is also saved with the Feedback automatic control system and operators are no longer concerned about the possibility of shocks due to static built up. Everyone from the management to the machine operators are delighted with the results." Production Manager, Technibond

"We were very impressed with the level of technical information that we received from Meech to ensure optimum operation of the equipment." Design Engineer, Autobond

Meech Innovation



# Hyperion 924IPS Short Range DC Ionising Bar

924IPS

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The Hyperion 924IPS is a short range pulsed DC ionising bar. It is powered by 24V DC and it is the most compact pulsed DC bar available on the market. This makes it the first 24V DC powered bar to be suitable for installation in positions that would normally require a traditional AC bar.

As with other Hyperion products, the 924IPS features Meech's Ion Current Monitoring (ICM) technology, this ensures performance is maintained with local and remote alerts when the bar needs cleaning.

Fully BarMaster and SmartControl compatible, the performance can be adjusted to suit particularly difficult applications. The 924IPS is the first Hyperion bar to have adjustable output voltage, frequency and balance. These features will help optimise the 924IPS for specific applications, including very sensitive applications such as RFID.



#### **Optimum Operating Distance**

20-200mm; suitable for short range applications, such as web paths on converting machinery, printing presses or applications that have traditionally used AC equipment.

#### Compact Size & Full Length Ionisation

At just 22mm (W) x 32mm (H), it will fit into tight installations. The bar is also designed to give full performance over its entire length.

#### Low Voltage Wiring

Requiring a 24V DC supply removes the need for high voltage wiring to the ionising bar.

#### Integrated Power Supply (IPS)

The integral pulsed DC power supply uses surface-mount high voltage components. This reduces the overall size of the bar, making it the most compact 24V DC bar available.

#### Adjustable Output

Output voltage, frequency and balance can be adjusted using the BarMaster or SmartControl. Adjustable output optimises the bar for sensitive applications like RFID.

#### Adjustable Clean Pin Alert

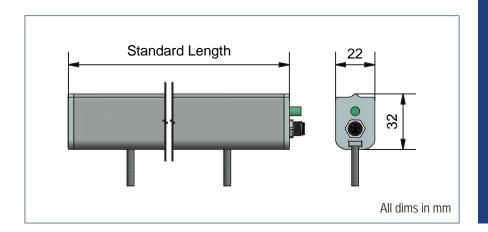
Meech Ion Current Monitoring (ICM) technology detects when the 924IPS needs to be cleaned. The LED on the bar alerts operators of the need for cleaning. This ensures peak performance is maintained.

#### **Environmental Protection**

IP66 construction makes the bar suitable for harsh environments.

#### Remote Dual Alarm Lines

Dual output signals for clean pin alert and fault alert will activate when the bar needs cleaning or a fault has been detected. This will alert operators remotely to check the bar.



#### Technical Characteristics

Optimum Operating Distance 20-200mm

Dimensions (WxH) 22mm x 32mm

Maximum Length 3960mm

Weight 0.5kg/metre

Construction FR ABS

Input Current Max 500mA

Input Voltage 24V DC (21-27V DC)

Output Voltage Adjustable, +/- 3 to 7.5kV pulsed DC

Electrical Connection 4 pole M8

#### **Output Frequency**

Default Setting: 20Hz Adjustable with BarMaster or SmartControl from 1Hz to 20Hz

#### Output Balance

Default Setting: 54% Positive, 46% Negative Adjustable with BarMaster or SmartControl from 80:20 to 20:80 Pos:Neg

Environmental Protection

Mounting 'T' Slot with M4 x 20mm studs

Emitters Sharp Titanium Pins

Max Ambient Temperature 60°C



# **Hyperion 960IPS** Mid-Range Ionising Bar

The new Hyperion 960IPS from Meech is a compact pulsed DC ionising bar with integrated high-voltage power supply (IPS). Powered by 24V DC, the 960IPS delivers powerful ionisation for mid-range applications. The 960IPS replaces the 929IPS and 971IPS-15kV.

The need for powerful ionisation to cope with modern fast machinery is answered by the Hyperion 960IPS. Compact dimensions of just 30mm x 45mm make it easy to install on printing and converting machinery. The 15KV pulsed DC output gives class-leading performance. The default settings will provide ideal static control on most installations with target distances from 150mm to 600mm. For more challenging applications the Hyperion BarMaster or SmartControl Touch programming unit (each sold separately) allows the settings of the bar to be adjusted by the user; to give optimum performance e.g. for improving long-range performance.

960IPS

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#### 15kV Output Voltage

The new 960IPS bar provides an output of 15kV compared with the 10kV provided by the original 929IPS bar. This 50% increase in power allows the 960IPS to operate at greater distances (up to 600mm).

#### Slimlined End Cap Design

The end caps of the 960IPS are slimline, resulting in no dead space. The bar offers fulllength ionisation, with the effective length the same as the overall length of the bar.

#### Low Voltage Wiring

The 960IPS is powered by 24V DC. The connection system is a standard industrial M8 connector. This greatly simplifies installation; avoiding the need to route high voltage cables from a remote high voltage power supply.

#### Adjustable Output

Performance can be optimised using the optional Hyperion BarMaster programmer or SmartControl Touch. Adjustable balance allows fine control in sensitive applications. Adjustable frequency allows the selection of the optimum frequency for the target distance.

#### Clean Pin Alert

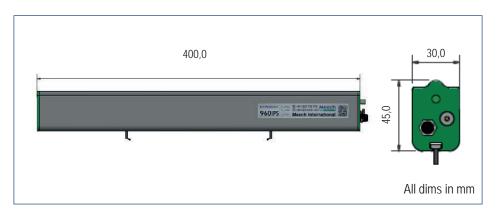
The local LED is solid green to indicate that the bar is on, working correctly and giving good ionisation performance. A red flashing LED shows that Meech's Ion Current Monitoring technology has detected that the bar needs cleaning.

#### T-Slot

Mounting of the bar is made easy using the T-Slot at the rear of the bar. The M4 T-Bolts used are the same as used on other Meech pulsed DC bars.

#### Shockless Titanium Emitters

The Titanium emitter pins on the 960IPS are resistively coupled to the high voltage supply. Independent research has shown titanium to be one of the very best materials for emitter pins; with extremely low wear rates. The resistive coupling built into the bar makes the pins shockless to touch, making it safe for operators to handle.



#### Technical Characteristics

Optimum Operating Distance 150-600mm

Dimensions (WxH) 30mmx45mm

Maximum Length 3900mm

Weight 0.9kg/metre

Construction ABS FR

Input Voltage 24V DC (21-27V DC)

#### Output Frequency Default Setting: 5Hz Adjustable (1-20Hz) via BarMaster or SmartControl Touch

#### **Output Balance**

Default Setting: 52% Positive, 48% Negative. Adjustable with BarMaster or SmartControl Touch

Environmental Protection

Max Ambient Temperature 60°C

Integrated Power Supply Removes the need for high voltage wiring

Mounting 'T' Slot with M4 x 30 studs

Input Current Max 500mA

Clean Pin Alert 0/24V

Low Voltage Wiring 24V DC Supply – Suits installation on modern machinery

Emitters Sharp titanium pins





# **Hyperion 971IPS-30** Long Range DC Ionising Bars

The Hyperion 971IPS-30 provides excellent long range ionisation at operating distances of 450-1200mm respectively. Powered by +/-30kV 24V DC integrated power supply (IPS), the 971IPS is designed to be easily installed and eliminate the need for high voltage cabling.

The 971IPS ionising bars feature Meech's Ion Current Monitoring (ICM) technology, which ensures performance is maintained with local and remote alerts when the bars needs cleaning.

Fully BarMaster and SmartControl Touch compatible, the frequency and balance can be adjusted to optimise performance to suit the application.



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#### **Optimum Operating Distance**

971IPS-30: 450-1200mm (1500mm with air boost); suitable for long range applications, such as slitter-rewinders, wicket bag machinery and turret winders.

#### Low Voltage Wiring

Requiring a 24V DC supply removes the need for high voltage wiring to the ionising bar.

#### Integrated Power Supply (IPS)

The integral pulsed DC power supply uses surface-mount high voltage components. This reduces the overall size of the bar.

#### Adjustable Output

Frequency and balance can be adjusted with the BarMaster programmer or SmartControl.

#### Air Boost

The range of the 971IPS-30 can be increased to 1500mm, using the integral air boost via the 6mm push-fit air fitting.

#### Adjustable Clean Pin Alert

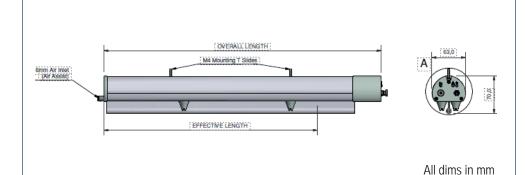
Meech Ion Current Monitoring (ICM) technology detects when the bar needs to be cleaned. The LED on the bar alerts operators of the need for cleaning. This ensures peak performance is maintained.

#### Removable Titanium Emitters

The emitter pin assemblies are designed to be easy to clean and replace, to maintain performance for many years.

#### Remote Signal

An output signal will activate when the bar needs cleaning or a fault has been detected. This will alert operators remotely to attend the bar.



Technical Characteristics

Optimum Operating Distance 971IPS-30: 450-1200mm

Dimensions (WxH) 63mm x 70mm

Maximum Length 971IPS-30: 4050mm

Weight 1.2kg/metre

Construction FR ABS

Input Current 971IPS-30: Max 625mA

Input Voltage 24V DC (21-27V DC)

Output Voltage 971IPS-30: +/- 30kV pulsed DC

Electrical Connection 4 pole M8

Output Frequency 971IPS-30: Default setting: 1Hz, Adjustable with BarMaster or SmartControl from 0.5Hz to 9.5Hz

Output Balance Default Setting: 60% Positive, 40% Negative Adjustable with BarMaster or SmartControl Touch from 80:20 to 20:80 Pos:Neg

Environmental Protection IP64 as standard; IP65 upon request

Max Ambient Temperature 60°C

Air Boost Connection 6mm push-fit

Air Consumption 5cfm per 1000mm at 1 bar



# **Hyperion 959IPS**

## Ionising Air Curtain

Meech

Meech International

HYPERION" 9591PS

The Hyperion 959IPS ionising air curtain is an extremely versatile product that provides effective static neutralisation and dust removal for a wide range of industrial applications.

The unit comprises a Hyperion 924IPS mounted on a Meech energy saving air curtain. Combined they provide a high speed laminar sheet of ionised air.

As with other Hyperion products, the 959IPS features Meech's Ion Current Monitoring (ICM) technology, which ensures performance is maintained with local and remote alerts when the bar needs cleaning.

Fully BarMaster and SmartControl Touch compatible, the frequency and balance can be adjusted to optimise performance.



#### **Optimum Operating Distance**

20-300mm for dust removal combined with a typical effective ionisation range of up to 300mm.

#### Energy Efficient Air Curtain

Can cut compressed air demand by up to 70%, reducing running costs.

#### Low Voltage Wiring

Requiring a 24V DC supply removes the need for high voltage wiring to the ionising bar.

#### Integrated Power Supply (IPS)

The integral pulsed DC power supply uses surface-mount high voltage components. This reduces the overall size of the bar.

#### Adjustable Output

Output voltage, frequency and balance can be adjusted using the BarMaster programmer or SmartControl. Adjustable output optimises the bar for a range of applications.

#### Adjustable Clean Pin Alert

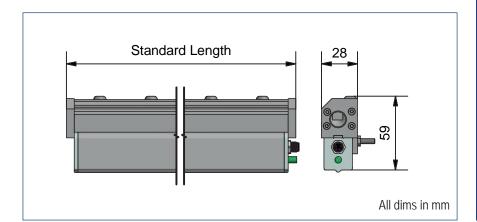
Meech Ion Current Monitoring (ICM) technology detects when the 924IPS needs to be cleaned. The LED on the bar alerts operators of the need for cleaning. This ensures peak performance is maintained.

#### **Environmental Protection**

IP66 construction makes the ionising air curtain suitable for harsh environments.

#### Remote Signal

An output signal will activate when the bar needs cleaning or a fault has been detected. This will alert operators remotely to attend the bar.



#### Technical Characteristics

Optimum Operating Distance 20-300mm

Dimensions (WxH) 28mm x 59mm

Maximum Length 1800mm

Weight 2.1kg/metre

Construction FR ABS / Aluminium

Input Current Max 500mA

Input Voltage 24V DC (21-27V DC)

Output Voltage Adjustable, +/- 3 to 7.5kV pulsed DC

Electrical Connection 4 pole M8

Output Frequency

Default Setting: 20Hz Adjustable with BarMaster or SmartControl from 1Hz to 20Hz

#### Output Balance

Default Setting: 54% Positive, 46% Negative Adjustable with BarMaster or SmartControl Touch from 80:20 to 20:80 Pos:Neg

Environmental Protection IP66

Mounting 'T' Slot with M4 x 20mm studs

Emitters Sharp Titanium Pins

Max Ambient Temperature 60°C

Air Curtain Connection 1/4" BSP

Air Consumption 112 I/min at 5 Bar per 25mm of length



# Hyperion SmartControl<sup>™</sup> Touch

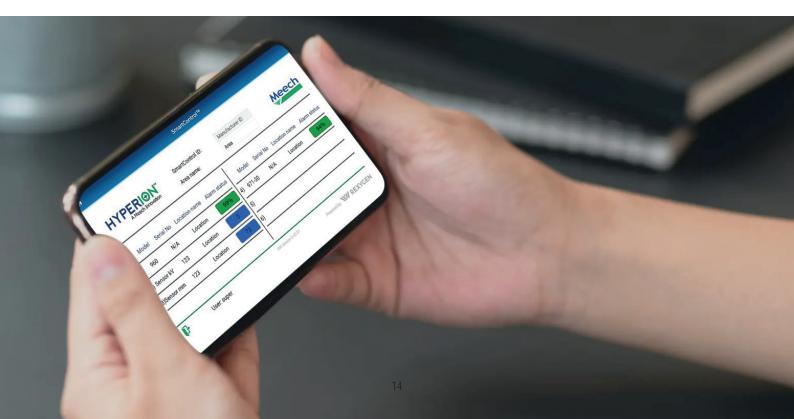
martControl Touch

### Remote Monitoring and Control

The Hyperion SmartControl Touch is the latest innovation from Meech. Designed to meet the needs of modern automated industries and harnessing Industry 4.0 technology to achieve maximum productivity and quality of output..

SmartControl Touch allows the user to monitor, control and adjust the performance of up to 30 compatible devices (using 2 x Meech Extension Modules) via the integrated touch-screen or remotely via a mobile phone, tablet, or remote desktop. The ionising equipment's performance is easily tracked by the SmartControl Touch, which uses Meech's Ion Current Monitoring Technology allowing the user to monitor and record the ionising performance.

Individually the SmartControl Touch has the capacity for up to 6 Hyperion products or sensors to be connected. Additional products can be connected using the optional Extension Modules which increases the total to 30 different devices all operating from one SmartControl Touch.



#### Remote Monitoring and Control

Makes quick and easy changes to connected devices.

#### **PLC Integration**

SmartControl Connectivity with PLCs for range of protocols including Profinet, EtherNet/ IP, Profibus, DPV1, Modbus-TCP, EtherCAT

#### Connections

Only one SmartControl is needed for the central control of six Hyperion devices. A further 24 devices can be connected using 2 x Extension Modules.

#### Sensor Compatible

For more accurate neutralisation of all charges on the material

#### Data Logging

Data monitored by SmartControl Touch can be viewed on screen or exported in CSV format

#### Two Configurations

Two configurations available: the SmartControl Touch with LAN or SmartControl Touch with industrial network connectivity.

#### Alarm Output

Contact free alarm output to signal alarm status

#### User-Friendly Interface

Clear and easy to use, with minimal training

#### Technical Characteristics

Dimensions (WxHxD) 280mm x 170mm x 60mm

Weight 1.2KG

Construction ASA + PC + FR

Input Voltage 24V DC

Output Ports

Output Ports Connection M8, 4 pole Murr

Connectivity USB, RJ45, Plus optional Industrial Network Connectivity

Mounting 4x Case Mounts

Password Protection Yes

Input Power 96W required









# **Hyperion 936 Ionising Blower** Long Range Ionisation

The Hyperion 936IPS Blower replaces the 935 Blower and is the latest addition to the Hyperion family, providing effective longrange ionisation over a large area. Its versatility makes it suitable for a wide range of industries, such as where there is a requirement for ionisation of three-dimensional objects on a conveyor or for a collection bin.

The 936 Blower is comprised of an ionising head and an integrated fan system. A high volume flow of ionised air is generated by blowing air through the ionisation head at the mouth of the unit. Ionisation is provided by the 924IPS bar, generating an operating range of up to 1200mm.

As a part of the Hyperion range, the 936IPS uses the same 4 pin M8 connector as the other Hyperion products including the 924IPS, 960IPS and 971IPS. OEM customers can power the blower directly from their own 24V supply. End-users may prefer to buy a 24V switch mode power supply from Meech.

The 936 Blower features all the adjustability and monitoring that you would expect from a Hyperion product. Fully BarMaster compatible, the output can be adjusted to suit particularly difficult applications. The 924IPS which is integrated into the 936IPS, is the first Hyperion bar to have an adjustable output voltage. This feature is useful in very sensitive applications such as cleanroom environments and gives complete control over the output.



#### Ionisation provided by 924IPS bar

Powerful ionisation with very fast decay times

#### High-Volume Airflow

Provides highly effective long-rang ionisation for three-dimensional objects

#### Low Voltage Wiring

A 24V DC supply removes the need for high-voltage wiring

#### Large Footprint

Effective over a large target area

Removable polypropylene grill Allows easy access for regular maintenance of the 924IPS ionising bar

#### Adjustable output (requires optional BarMaster)

Output voltage, frequency and balance can be adjusted using the BarMaster programmer

#### Mounting Brackets

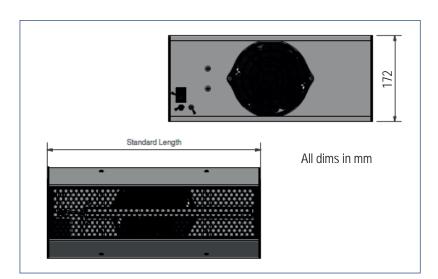
To enable mounting on walls, benches, ceilings etc. in order to suit any application

#### Adjustable Clean Pin Alert

Detects when the 936 blower ionising bar needs to be cleaned to ensure peak performance is maintained

#### Available in a range of lengths

Allows the flexibility to optimise the performance for individual applications



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#### Technical Characteristics

Dimensions (WxHxL) 184mm x 172mm x 1200mm

Weight Approx 6.5KG (for 800m length)

#### Construction

Bar = FR ABS Blower = Extruded anodised body with steel plate ends

Input Voltage 24V DC (21-27VDC)

Maximum Ambient 60°C

Mounting Painted brackets supplied with each unit

#### Maximum power consumption Blower length up to 800mm = 48W

Blower lengths 1000mm and 1200mm = 96W

#### Output voltage

Adjustable with BarMaster via MURR connector on back panel

Emitters Sharp, titanium pins

#### Available lengths 300mm, 400mm, 600mm, 800mm, 1000mm, 1200mm

Indicator LEDs Green/red flashing LED on 924IPS bar

#### Controls

Balance, voltage and frequency controlled by BarMaster via M8 connector on back panel.

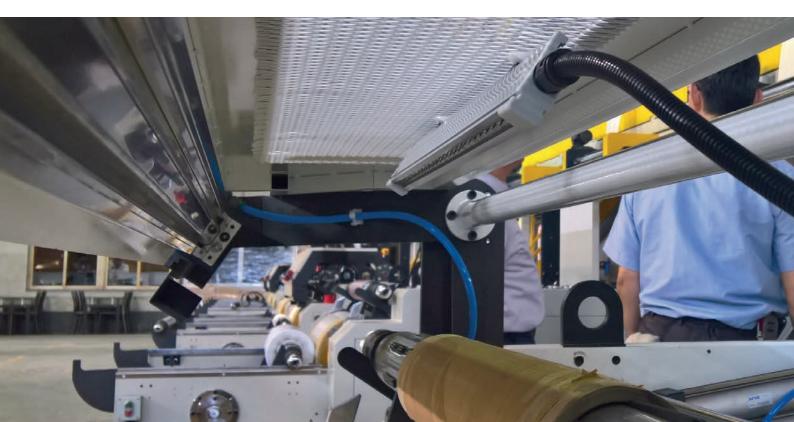
Operating range 200-1200mm



# Hyperion lonCharge30 30kV Static Generator

#### IonCharge30 is designed for use across a range of common applications including pinning, bag making and card insertion. It uses advanced high voltage technology and software for a controlled static charge via our range of static generator bars and pinning heads. The static charge can be either positive or negative (model dependant) and is used to impart temporary bonding between materials, at least one of which is insulative.

The IonCharge30 provides independently selectable voltage and current and the inclusion of a colour touchscreen interface provides simple adjustment and clear display of settings. The functionality and simple adjustment and control of the output voltage and current means that the IonCharge30 is extremely versatile and effective for a range of applications and materials.



#### 15 Watt Power Output

Providing an adjustable output range of voltage (0-30kV) and current (0-0.5mA), performance can be optimised for a variety of applications and maximum pinning effect can be achieved without risk of overload.

#### Hyperion 24V DC Power Supply

24V DC power is often the preferred power supply for use with industrial equipment for several reasons including safety, reliability, ease of installation.

#### Selectable Voltage and Current

Increased control across a range of applications and material types.

#### Perforation and Hole Detection

Built in perforation and hole detection functionality for use in applications such as the manufacture of plastic bags.

#### Remote On/Off

The IonCharge30 can be switched on/off in association with machine operation.

#### Multi-Language Support

IonCharge30 supports multi-language displays in English, Mandarin, French, German, Italian and Spanish.

#### Colour Touch Screen User Interface

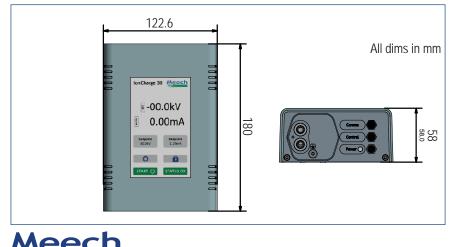
Clear and intuitive information display and simple input of settings.

#### Connectivity to Industrial Networks

Optional industrial network connectivity via external module for integration with existing PLC compatible industrial networks for monitoring and control.

#### Twin High Voltage Outputs

Multiple generator bars can be connected.



#### Technical Characteristics

Dimensions (WxHxD) 122.6 x 58 x 180 mm

Weight 0.75 kg

Supply Voltage 24V DC

Max Output Power

Output Polarity Negative or positive variants available

Adjustable Increments Voltage (V) 0.1kV Current (I) 0.01mA

4-20mA Control Independent voltage and current inputs. Input resistance 1k Ω

HT Output 2 x Meech 30kV connection ports

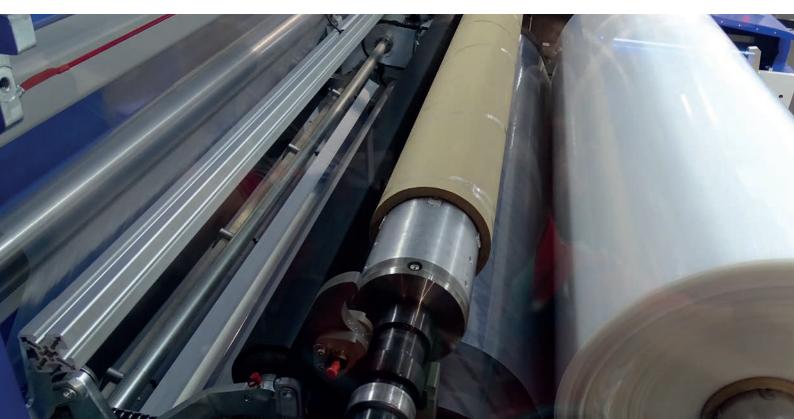


# **Hyperion IonCharge50** 50kV Static Generator

IonCharge50 (75W) static generator is designed for a range of applications, including core pinning, laminating and sheet pinning. It uses advanced high voltage technology and software for a controlled static charge via our range of static generator bars and pinning heads.

The IonCharge50 provides independently selectable voltage and current and the inclusion of a colour touchscreen interface provides simple adjustment and clear display of settings. The functionality and simple adjustment and control of the output voltage and current means that the IonCharge50 is extremely versatile and effective for a range of applications and materials.





#### 75 Watt Power Output

Providing an adjustable output range of voltage (0-50kV) and current (0-2.5mA), performance can be optimised for a variety of applications and maximum pinning effect can be achieved without risk of overload.

# Hyperion 24V DC Power Supply or 240V AC Power Supply

Choice of power supply, allowing for flexible installation options.

#### Selectable Voltage and Current

Increased control across a range of applications and material types.

#### Perforation and Hole Detection

Built in perforation and hole detection functionality for use in applications such as the manufacture of plastic bags.

#### Remote On/Off

The IonCharge50 can be switched on/off in association with machine operation.

#### Multi-Language Support

IonCharge50 supports multi-language displays in English, Mandarin, French, German, Italian and Spanish.

#### Colour Touch Screen User Interface

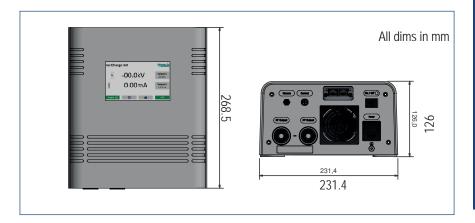
Clear and intuitive information display and simple input of settings.

#### Connectivity to Industrial Networks

Optional industrial network connectivity via built-in module for integration with existing PLC compatible industrial networks for monitoring and control.

#### Twin High Voltage Outputs

Multiple generator bars can be connected.



#### Meech

#### Technical Characteristics

Dimensions (WxHxD) 231.4mm x 126mm x 268.5 mm

Weight 3.75 kg

Supply Voltage 24V DC or 240V AC

Max Output Power

Output Polarity Negative or positive variants available

Adjustable Increments Voltage (V) 0.1kV Current (I) 0.01mA

4-20mA Control Independent voltage and current inputs Input resistance 1k Ω

HT Output 2 x Meech 50kV connection ports



# Hyperion 233v4 & 233v4 HL Pulsed DC Controller

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233va Puls

The Hyperion 233v4 Pulsed DC Controller is a compact and powerful 15kV controller. It was principally designed to directly power two Meech pulsed DC ionisers. If more ionisers are required, they can be connected via splitters.

The versatility and flexibility of the 233v4 make it suitable for use in a wide range of industries, with easy installation.

The 233v4 features all the adjustability and monitoring that you would expect from a Hyperion product. Fully BarMaster and SmartControl compatible, the output voltage, frequency and balance can all be adjusted to suit particularly difficult applications. The adjustable output voltage is particularly useful in very sensitive applications such as those found in cleanroom environments.

A Hazardous Location version is also available to deliver the same advantages of the 233v4, to controlled environments.



#### 24V Input Voltage

The controller is powered by 24V via the standard Hyperion 4 pin M8 Connector.

#### Dual Output

Designed to directly power two Meech pulsed DC ionisers. If more ionisers are required, they can be connected via splitters.

#### 3 Colour LED

Easy to see LED indicators ensure the state of the power unit can be viewed at any angle. The colour and state of the LEDs, show whether the system is operating correctly or if it needs attention.

#### HT Failure Alert

Local and remote alert of damage or HT failure.

#### Clean Pin Alert

Local and remote instruction to clean the bar. The LED will illuminate to indicate the system is on, working correctly and giving good ionisation performance. A change to a flashing red LED shows Meech's Ion Current Monitoring (ICM) technology has detected that the bars need cleaning.

#### Sealed Construction

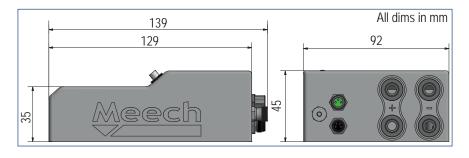
IP67 construction allows the controller to be mounted in areas subject to wash-down or spillage.

#### Adjustments

The 233v4 features all the adjustability and monitoring that you would expect from a Hyperion product. Fully BarMaster and SmartControl Touch compatible, the output voltage, frequency and balance can all be adjusted to suit particularly difficult applications. The optional remote on/off feature allows the unit output to be switched on and off using volt free contact.

#### Hazardous Location Version

The Hyperion 233v4HL Pulsed DC Controller is specifically designed for use in hazardous environments. Including the same features and benefits of the standard 233v4, the HL version will be able to directly power two Meech DC EX bars.



#### Technical Characteristics

Dimensions (WxHxD) 45mm x 92mm x 129mm

Weight 650g

Construction DuraForm PA (Nylon 12)

Output Current 5mA Maximum

Input Voltage 24V DC - N.B. Supply must be grounded.

Output Voltage Adjustable, 2 to 15kV DC HL Version, 5.5kV

Output Balance Adjustable, 80:20 - 20:80 Pos:Neg

Output Frequency Adjustable, 1-20Hz

Connection 4 pin M8, Earth terminal

Settings Control BarMaster or SmartControl Touch

LED Indication Green/Red/Amber LEDs

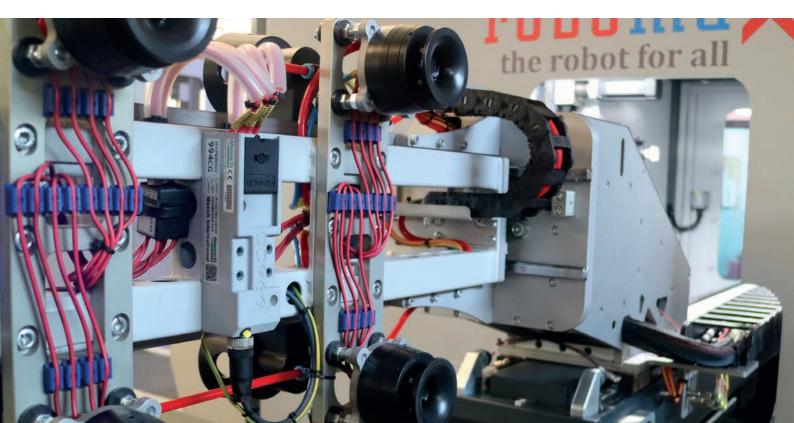




# Hyperion 994CG Compact IML Generator

The Hyperion 994CG Compact IML Generator is the first generator to be developed as part of the Hyperion range. Developed for the In Mould Labelling (IML) market, Meech has designed the 994CG to meet the growing demand for a compact, lightweight generator to fit on the end of a robot arm.

The 994CG is the only generator to feature 4 x 25kV outlets, allowing the coupling of Meech Hydras without the need for a splitter whilst still maintaining its compact dimensions. Powered by a 21-30V DC supply it is one of the most powerful compact IML Generators available.



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HYPERION 994CG AVDC Sales@meech.com Josky Sales@meech.com Soly Meech International

#### Low voltage wiring

Requiring a 24V DC supply removes the need for high voltage wiring to the compact IML Generator. This greatly simplifies installation; avoiding the need to route high voltage cables from a remote high voltage generator.

#### Integrated Power Supply (IPS)

The integral DC power supply uses surface mount high voltage components. This reduces the overall size of the 994CG helping with installation into tight spaces.

#### Compact size

Allows installation directly on horizontal or vertical access robot arms.

#### Adjustable Output

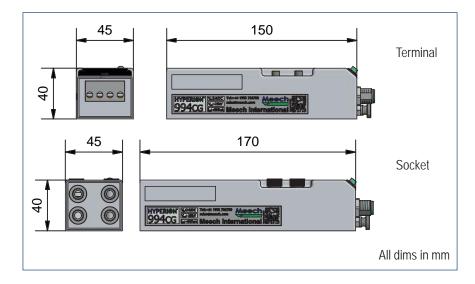
The output voltage can be adjusted to suit sensitive applications. This can be programmed remotely either with an existing PLC control, a Meech Remote Set Point control or via a Meech BarMaster programmer or SmartControl.

#### PLC Control

The voltage, remote on/off and alarms can be activated, adjusted or monitored via the robot PLC. This can be fully integrated into the robots programming.

#### Remote Set Point Control

For applications without PLC control, BarMaster or SmartControl connectivity, a manually operated Remote Set Point Control can be supplied to allow adjustment to output voltage.



#### Technical Characteristics

Dimensions (WxHxD) 45mm x 40mm x 170mm (Socket) 45mm x 40mm x 150mm (Terminal)

Weight 400g

Construction DuraForm PA (Nylon 12)

Input Current 200mA-850mA Load Dependant

Input Voltage 21-30V DC - N.B. Supply must be grounded

Output Voltage 4-25kV

Connection 5 Pin M12

Settings Control BarMaster, SmartControl, PLC Control or Remote Set Point Control

Set Point 4-20mA, 1-5VDC

Environmental Protection IP66 – Socket IP64 – Terminal

#### Local Indication

Two colour solid green = standby, flashing green = charging, red = fault



# Hyperion Barmaster Remote Programmer

BarMaster

Meech

The Hyperion BarMaster is a remote programmer designed to connect with any Hyperion product.

The BarMaster temporarily connects in-line with the 24V power supply to the bar and allows adjustment of the output and clean pin alert settings. When programming is completed the BarMaster is disconnected, once re-powered the Hyperion ionisers will operate at the programmed settings.



Universal Hyperion BarMaster can be used to adjust the settings of any Hyperion product.

#### Hand Held Programmer

Portable and easy to carry around.

#### Frequency Adjustment

Frequency can be adjusted to suit different operating distances.

#### Balance Adjustment

Balance can be set for the most rapid static control in demanding applications or for the best balance on sensitive applications.

#### Clean Pin Alert

Clean pin alert setting can be changed to suit the demands of the application.

#### Future Proof

The BarMaster has been designed to be compatible with current and future Hyperion products.



#### Technical Characteristics

Dimensions (WxHxD) 81mm x 143mm x 25mm

Construction ABS

Cable Length 2000mm

Input Voltage 24V

Electrical Connection 4 pin M8 Connector





# All you need, from the best in the business

Meech is also a leading provider of:

- Industrial Static Control Systems Eliminating unwanted static or creating a controlled static charge in industrial processes can increase productivity, reduce waste and enhance quality.
- Web Cleaning Systems Typically used within the printing and packaging industries to remove contamination, improve print quality and increase productivity.
- Air Technology Equipment Industrial compressed air products that are energy efficient, reduce noise levels, cut costs and provide efficient cooling.
- Surface Cleaning Systems IonWash, IonRinse and JetStream Air Knife Systems Energy efficient 3D surface cleaning systems that are used for contamination and surface moisture removal.

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