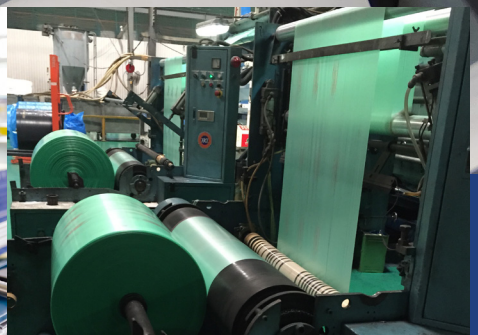


# HYPERION™

A Meech Innovation



**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:

Aerospace	Medical
Automotive	Packaging
Food & Beverage	Pharmaceutical
Converting	Plastics
Electronics	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.

The Quasi AC Hyperion range helps in achieving low and stable offset voltage that is a requirement in the electronics industry where electrostatic discharge control standard requires ionising devices with offset voltage of less than +/-35V.

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, power supplies and test & measuring equipment.



# We've got the world covered

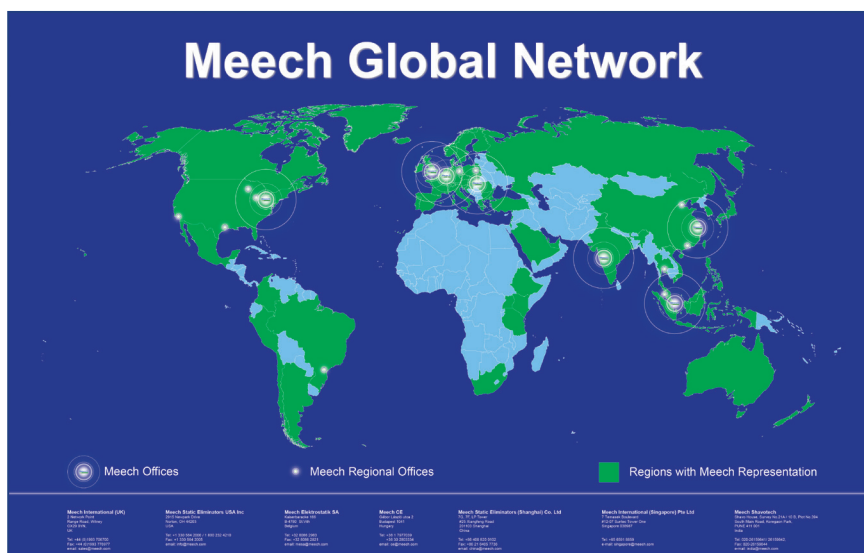
Wherever you are in the world you'll find Meech hard at work, providing a wide range of businesses with specialist expertise. From the headquarters and technical centre in the UK, our manufacturing subsidiary in the USA to the sales and marketing offices in Belgium, Hungary, China, India and Singapore 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 product. 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.



"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*

# HYPERION™

## A Meech Innovation

The Hyperion Static Control range from Meech, includes ionising 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 110/240V 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.

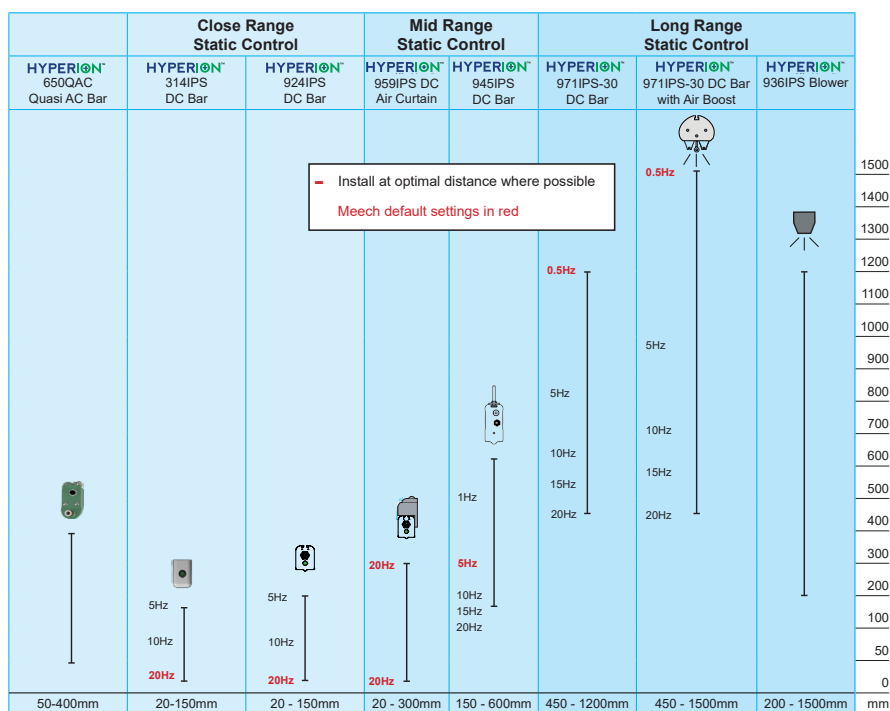
In answer to these two demands Meech has developed the Hyperion range. Hyperion bars are designed to provide all the power, flexibility and features of a pulsed DC ionising bar combined with the compact dimensions and performance of an AC ionising bar.

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.

The new 650QAC ionising bar features new technology to achieve a very low and stable offset voltage that is a requirement in applications such as the electronics industry where the ESD (electrostatic discharge) control standard requires ionising devices with offset voltages of less than +/- 35V.

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

\* Not to scale. Actual positioning will depend on the type of application.





# Hyperion Bar Feature Comparison

FEATURE	650QAC	314IPS	924IPSV2	945IPS	971IPS-30
Optimum Working Distance	50 to 400mm	20 to 150mm	20 to 200mm	150 to 600mm	450 to 1200mm (1500mm with air boost)
Dimensions (W x H)	31.4 x 69mm	25 x 38mm	22 x 32mm	30 x 45mm	63 x 70mm
Maximum Length	656mm	920mm	3960mm	3900mm	4050mm
Weight (per meter)	1.2kg	1.54kg	0.5kg	0.9kg	1.2kg
Construction	ABS Plastic FR	PTFE (FDA & EU approval)	ABS Plastic FR		
Mounting	‘T’ Slot with M4 x 20mm studs	2 or 4 x M5 x 6mm Female Locations	‘T’ Slot with M4 x 20mm studs	‘T’ Slot with M4 x 35mm studs	‘T’ Slot with M4 x 20mm studs
Shockless Titanium Emitters	✓				
Replaceable Emitter Pins	✓	×	×	×	✓
Low Voltage Wiring	24V DC (21-27V DC)				
Output Voltage	+/- 7.5kV Adjustable	+/- 3 to 7.5kV Pulsed DC Adjustable	+/- 3 to 7.5kV Pulsed DC Adjustable	+/- 2 to 15kV Pulsed DC Adjustable	+/- 4 to 30kV Pulsed DC
Adjustable Frequency	5 to 20Hz	1 to 20Hz			0.5 to 9.5Hz
Adjustable Balance	80:20 to 20:80 Pos:Neg				
Clean Pin Alert and Fault Alerts	✓				
Integrated Power Supply (IPS)	✓				

"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*

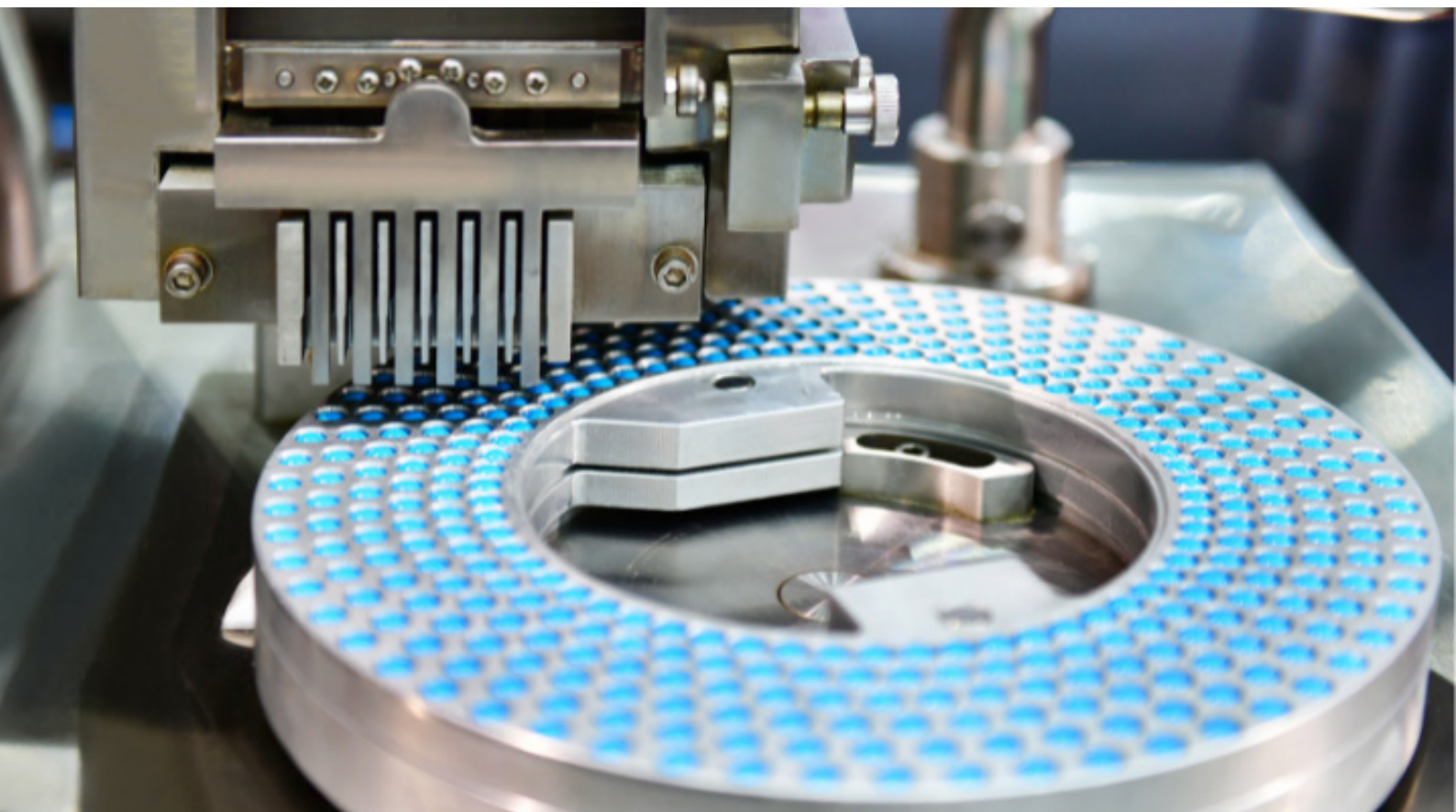
# Hyperion 314IPS

## Short Range DC Ionising Bar

The Hyperion 314IPS hygienic bar is a compact ionising bar for short range applications where hygiene and sterility is a critical factor. It shares the same ionisation and technical features of our popular Hyperion ionising bars, and is compatible with SmartControl Touch and BarMaster.

The smooth design minimises the risk of dirt and contamination getting trapped on the bar, and would be beneficial to industries where hygiene is critical, for example, Pharmaceutical, Medical Devices, and Food Packaging.

The 314IPS is the latest innovation to Meech and is the first of its kind. The compact bar meets relevant GMP (Good Manufacturing Practice) guidelines, and also features FDA compliant materials.



# Features & Benefits

## Hygienic Design

Design minimises the risk of dirt and contamination getting trapped on the bar. Materials used are also FDA compliant.

## Adjustable Output

Ability to adjust the voltage, frequency and balance via BarMaster or SmartControl; leading to optimised performance.

## Low Voltage Wiring

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

## Integrated 24V DC Power Supply (IPS)

Reduces the overall size of the bar, making it compact and easy to install.

## Dual Alarm Remote Signal Output

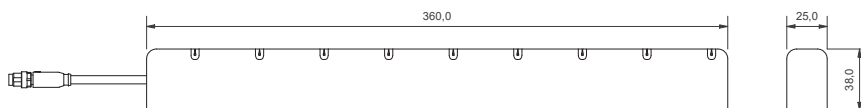
Enabling remote monitoring for system maintenance, clean pin and fault alerts.

## Shockless Titanium Emitters

Independent research has shown titanium to be one of the very best materials for emitter pins; with extremely low wear rates. Titanium emitter pins also provide good cleanroom compatibility.

## IP66 Fully Sealed Waterproof

Enables use in harsh environments including where subject to washdown.



All dimensions in mm

## Technical Characteristics

**Optimum Operating Distance**  
20 to 150mm

**Dimensions (WxH)**  
25mm x 38mm

**Maximum Length**  
920mm

**Weight**  
1.54kg/metre

**Construction**  
PTFE

**Output Frequency**  
Default Setting: 20Hz,  
Adjustable with BarMaster or  
SmartControl Touch

**Output Balance**  
BarMaster or SmartControl adjustable  
between 80:20 to 20:80 Pos:Neg  
(Default 54:46 Pos:Neg)

**Output Voltage**  
Adjustable, 3 to 7.5kVDC Pos/Neg

**Environmental Protection**  
IP66

**Max Ambient Temperature**  
60°C

**Mounting**  
2 x M5 x 6mm Female Locations

**Input Current**  
Maximum 500mA

**Clean Pin Alert**  
0/24V

**Fault Alert**  
0/24V

**Input Voltage**  
24VDC (21 to 27VDC)

**Low Voltage Wiring**  
24VDC Supply - Suits installation on  
modern machinery

**Emitters**  
Sharp titanium pins



# Hyperion 650QAC

## Quasi AC Ionising Bar

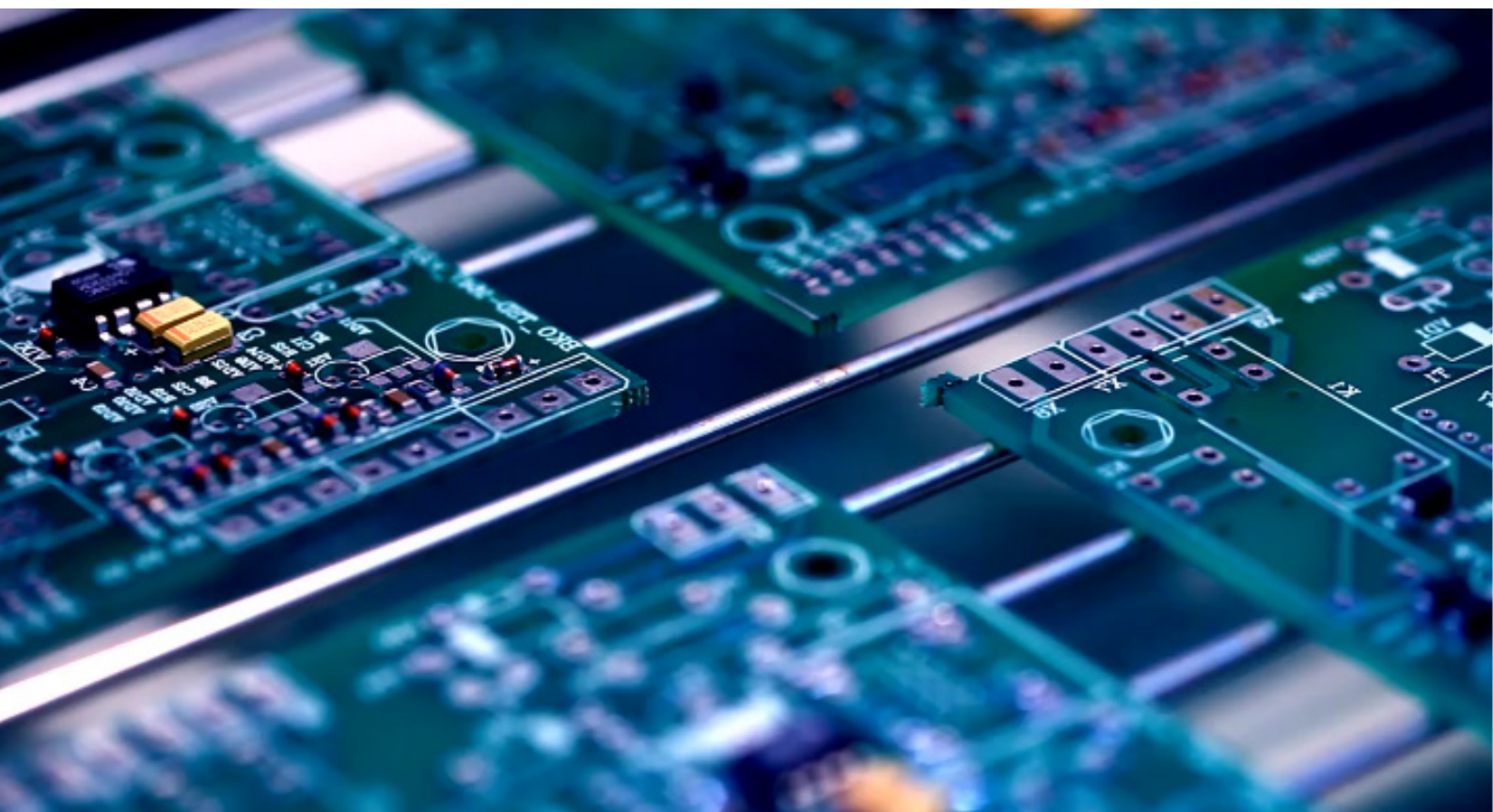


Designed to meet ESD (electrostatic discharge) control standards, the new 650QAC ionising bar features new technology to achieve a very low and stable offset voltage, which is a requirement in applications such as the electronics industry where the ESD control standard requires ionising devices with offset voltages of less than  $\pm 35V$ .

Key QAC technology benefits:

- Quasi AC (QAC) high voltage waveform generates positive and negative ions from each emitter pin
- Delivers rapid ionisation with very low offset voltage
- Auto balancing technology to maintain performance

Pre-set distance configurations can be selected using the built-in keypad. These pre-set configurations modify the output settings to give near-zero residual voltage, without the need for expensive additional test equipment. For installations that require extra accuracy, the keypad allows fine adjustment of the balance to be made.



# Features & Benefits

## Very Low Offset Voltage

Designed to exceed the ESD control requirements of +/- 35V.

## Auto Balance Technology

To maintain low offset voltage. Total Ion Current Control (TICC).

## Pre-set Distance Configurations

For simple setup for optimal performance. Selected using the built-in keypad.

## LED Indicator

For cleaning alert and fault alert.

## Air Assist

6mm air connector for optimal performance in longer range applications

## Shockless Titanium Emitters Pins

Independent research has shown titanium to be one of the very best materials for emitter pins; with extremely low wear rates. Titanium emitter pins also provide good cleanroom compatibility.

## Remote Compatibility

Compatible with Meech Remote Programmers. Performance can be further optimised using the optional Hyperion BarMaster programmer or SmartControl Touch.

## Integrated 24VDC Power Supply (IPS)

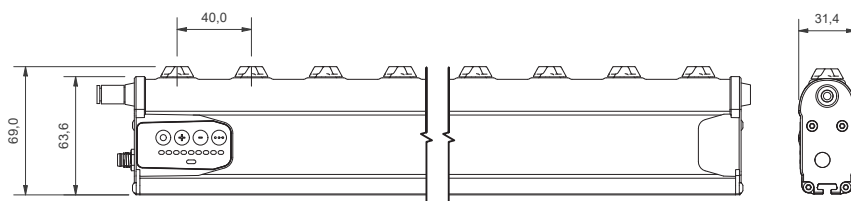
Reduces the overall size of the bar, making it compact and easy to install.

## Dual alarm remote signal output

Enabling remote monitoring for system maintenance and fault alerts.

## Replaceable Emitter Assembly

Allowing easy replacement.



All dimensions in mm

## Technical Characteristics

**Optimum Operating Distance**  
50 to 400mm

**Dimensions (WxH)**  
31.4mm x 69mm

**Maximum Length**  
656mm (effective 640mm)

**Construction**  
Body ABS Plastic FR

**Input Voltage**  
24VDC (21 to 27VDC)

**Low Offset Voltage**  
Exceeds the  $\pm 35V$  defined in the ionisation standard ANSI/ESD STM3.1

**Output Frequency**  
Auto-adjusted based on operating distance pre-set

**Output Balance**  
Adjustable

**Max Ambient Temperature**  
60°C

**Integrated Power Supply**  
Removes the need for high voltage wiring

**Mounting**  
'T' Slot with M4 x 20mm studs

**Input Current**  
Maximum 500mA

**Clean Pin Alert**  
0/24V

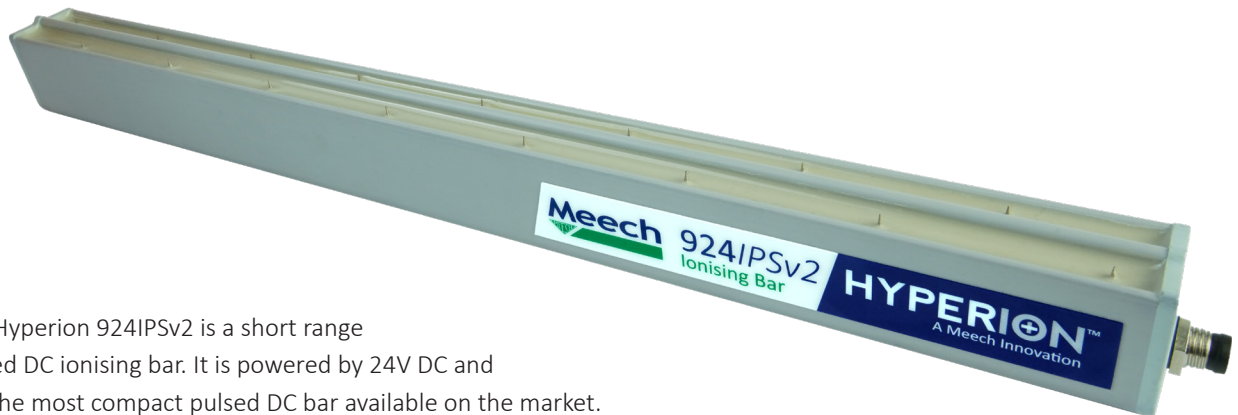
**Fault Alert**  
0/24V

**Low Voltage Wiring**  
24VDC Supply - Suits installation on modern machinery

**Emitters**  
Sharp titanium pins. Replaceable

# Hyperion 924IPsv2

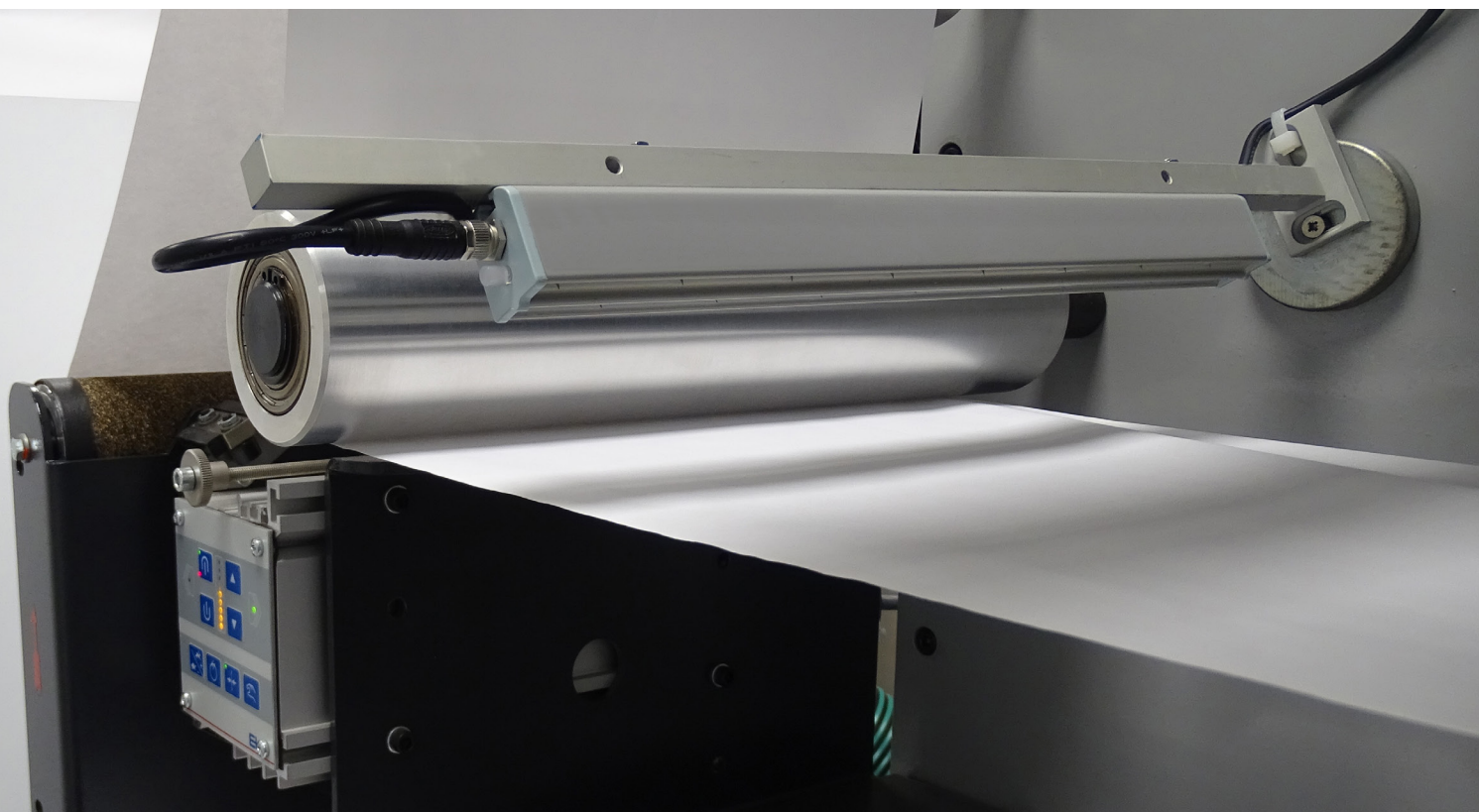
## Short Range DC Ionising Bar



The Hyperion 924IPsv2 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 924IPsv2 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 924IPsv2 was the first Hyperion bar to have adjustable output voltage, frequency and balance. These features will help optimise the 924IPsv2 for specific applications, including very sensitive applications such as RFID.





# Features & Benefits

## Optimum Operating Distance

20 to 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 22.1mm (W) x 32.2mm (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 24VDC 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 24VDC 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 924IPSV2 needs to be cleaned. The LED on the bar alerts operators of the need for cleaning. This ensures peak performance is maintained.

## Environmental Protection

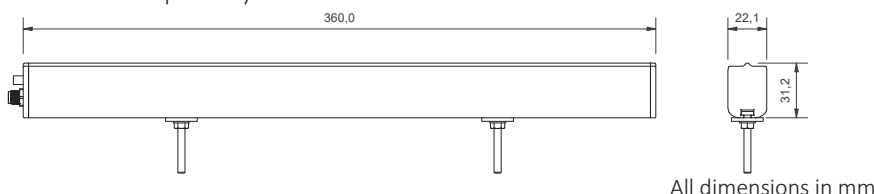
IP66 construction makes the bar suitable for harsh environments.

## 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.

## Shockless Titanium Emitters Pins

Independent research has shown titanium to be one of the very best materials for emitter pins; with extremely low wear rates. Titanium emitter pins also provide good cleanroom compatibility.



## Technical Characteristics

**Optimum Operating Distance**  
20 to 200mm

**Dimensions (WxH)**  
22.1mm x 31.2mm

**Maximum Length**  
3960mm

**Weight**  
0.5kg/metre

**Construction**  
FR ABS

**Input Current**  
Max 500mA

**Input Voltage**  
24VDC (21 to 27VDC)

**Output Voltage**  
Adjustable, 3 to 7.5kVDC Pos/Neg

**Electrical Connection**  
4-Pin, M8

**Output Frequency**  
Default Setting: 20Hz,  
Adjustable with BarMaster or  
SmartControl from 1Hz to 20Hz

**Output Balance**  
BarMaster or SmartControl adjustable  
between 80:20 to 20:80 Pos:Neg  
(Default 54:46 Pos:Neg)

**Environmental Protection**  
IP66

**Clean Pin Alert**  
0/24V

**Fault Alert**  
0/24V

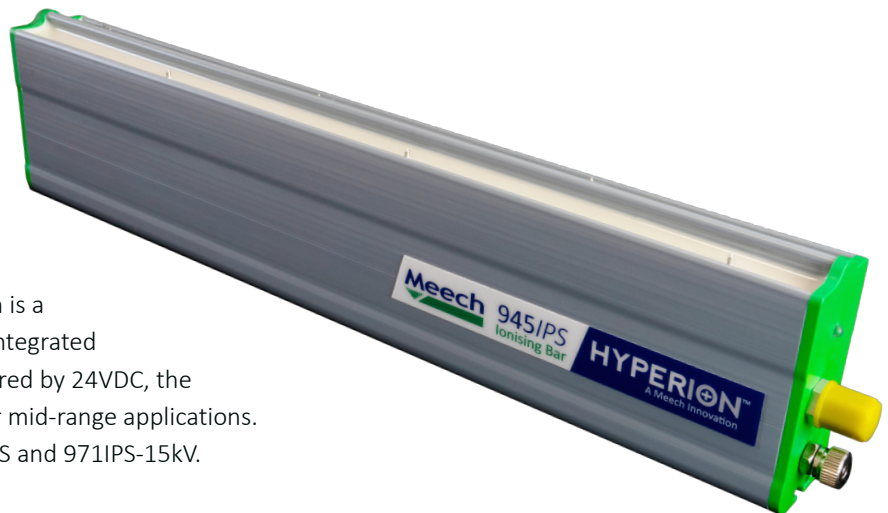
**Mounting**  
'T' Slot with M4 x 20mm studs

**Emitters**  
Sharp titanium pins

**Max Ambient Temperature**  
60°C

# Hyperion 945IPS

## Mid-Range DC Ionising Bar



The new Hyperion 945IPS from Meech is a compact pulsed DC ionising bar with integrated high-voltage power supply (IPS). Powered by 24VDC, the 945IPS delivers powerful ionisation for mid-range applications. The 945IPS replaces the 929IPS, 960IPS and 971IPS-15kV.

The need for powerful ionisation to cope with modern fast machinery is answered by the Hyperion 945IPS. Compact dimensions of just 30mm (W) x 67mm (H) make it easy to install on printing and converting machinery. The maximum 15kV pulsed DC output (default 12.5kV) gives class-leading performance. The default settings will provide ideal static control on most installations with target distances from 150 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.



# Features & Benefits

## 15kVDC Output Voltage

The new 945IPS bar provides a maximum output of 15kVDC (default 12.5kV) compared with the 10kVDC provided by the original 929IPS bar. This 50% increase in power allows the 945IPS to operate at greater distances (up to 600mm).

## Slimlined End Cap Design

The end caps of the 945IPS are slimline, resulting in no dead space. The bar offers full-length ionisation, with the effective length the same as the overall length of the bar.

## Low Voltage Wiring

The 945IPS is powered by 24VDC. 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.

## 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.

## T-Slot

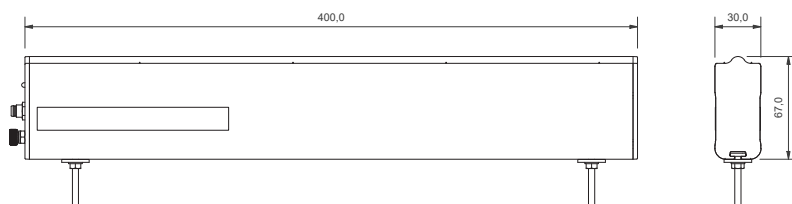
Mounting of the bar is made easy using the T-Slot at the rear of the bar. The M4 T-Bolts used are optimised for durability when mounting the bar and are 35mm long.

## 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.

## Shockless Titanium Emitters

The Titanium emitter pins on the 945IPS 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.



All dimensions in mm

## Technical Characteristics

**Optimum Operating Distance**  
150 to 600mm

**Dimensions (WxH)**  
30mm x 67mm

**Maximum Length**  
3900mm

**Weight**  
0.9kg/metre

**Construction**  
FR ABS

**Input Voltage**  
24V DC (22 to 26VDC)

**Output Voltage**  
2 to 15kVDC Pos/Neg

**Output Frequency**  
Default Setting: 5Hz,  
Adjustable (1 to 20Hz) via BarMaster or  
SmartControl Touch

**Output Balance**  
BarMaster or SmartControl adjustable  
between 80:20 to 20:80 Pos:Neg  
(Default 58:42 Pos:Neg)

**Environmental Protection**  
IP66 Construction

**Max Ambient Temperature**  
60°C

**Integrated Power Supply**  
Removes the need for high voltage wiring

**Mounting**  
'T' Slot with M4 x 35mm studs

**Input Current**  
Max 625mA

**Clean Pin Alert**  
0/24V

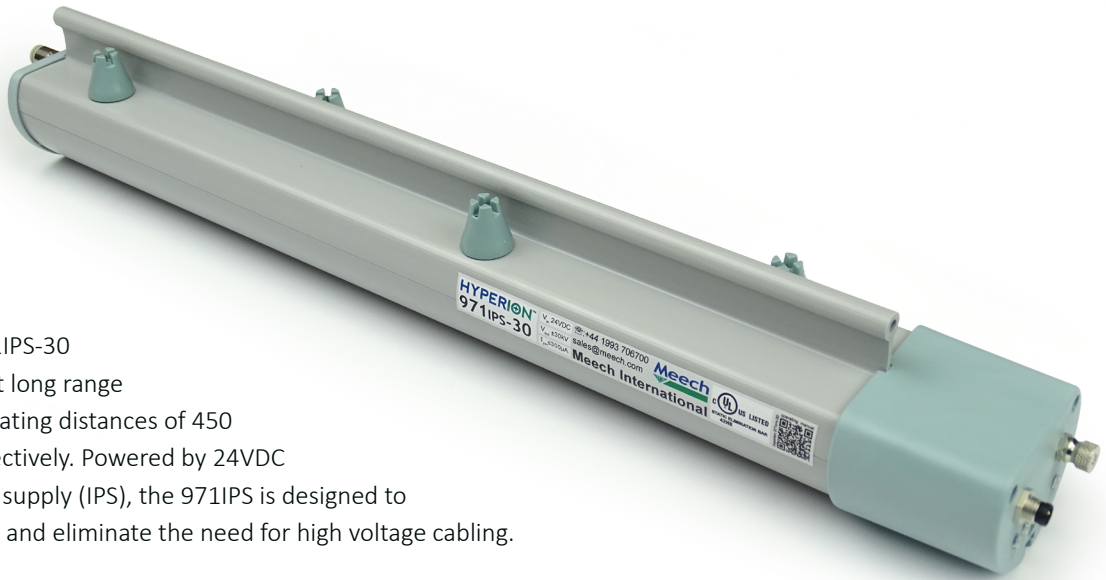
**Low Voltage Wiring**  
24VDC Supply – Suits installation on  
modern machinery

**Emitters**  
Pure titanium cone shaped pins



# Hyperion 971IPS-30

## Long Range DC Ionising Bar



The Hyperion 971IPS-30 provides excellent long range ionisation at operating distances of 450 to 1200mm respectively. Powered by 24VDC 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 bar needs cleaning.

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



# Features & Benefits

## Optimum Operating Distance

971IPS-30: 450 to 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 24VDC 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

Voltage, 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

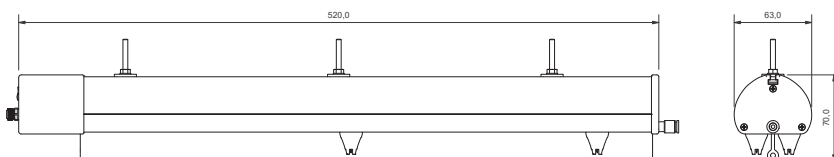
Meech Ion Current Monitoring (ICM) technology detects when the bar needs to be cleaned. The LED on the bar alerts operators of the need for cleaning. This ensures peak performance is maintained.

## 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.



All dimensions in mm

## Technical Characteristics

**Optimum Operating Distance**  
450 to 1200mm

**Dimensions (WxH)**  
63mm x 70mm

**Maximum Length**  
3920mm

**Weight**  
1.2kg/metre

**Construction**  
FR ABS

**Input Current**  
Max 625mA

**Input Voltage**  
24VDC (21 to 27VDC)

**Output Voltage**  
2 to 15kVDC Pos/Neg

**Electrical Connection**  
4-Pin, M8

**Output Frequency**  
Default setting: 1Hz,  
Adjustable with BarMaster or  
SmartControl from 0.5Hz to 9.5Hz

**Output Balance**  
BarMaster or SmartControl adjustable  
between 80:20 to 20:80 Pos:Neg  
(Default 60:40 Pos:Neg)

**Environmental Protection**  
IP64 as standard; IP65 upon request

**Max Ambient Temperature**  
60°C

**Air Boost Connection**  
6mm push-fit

**Air Consumption**  
113 l/min per 1000mm at 1 bar

**Emitters**  
Sharp titanium pins. Replaceable

# Hyperion 959IPS

## Ionising Air Curtain

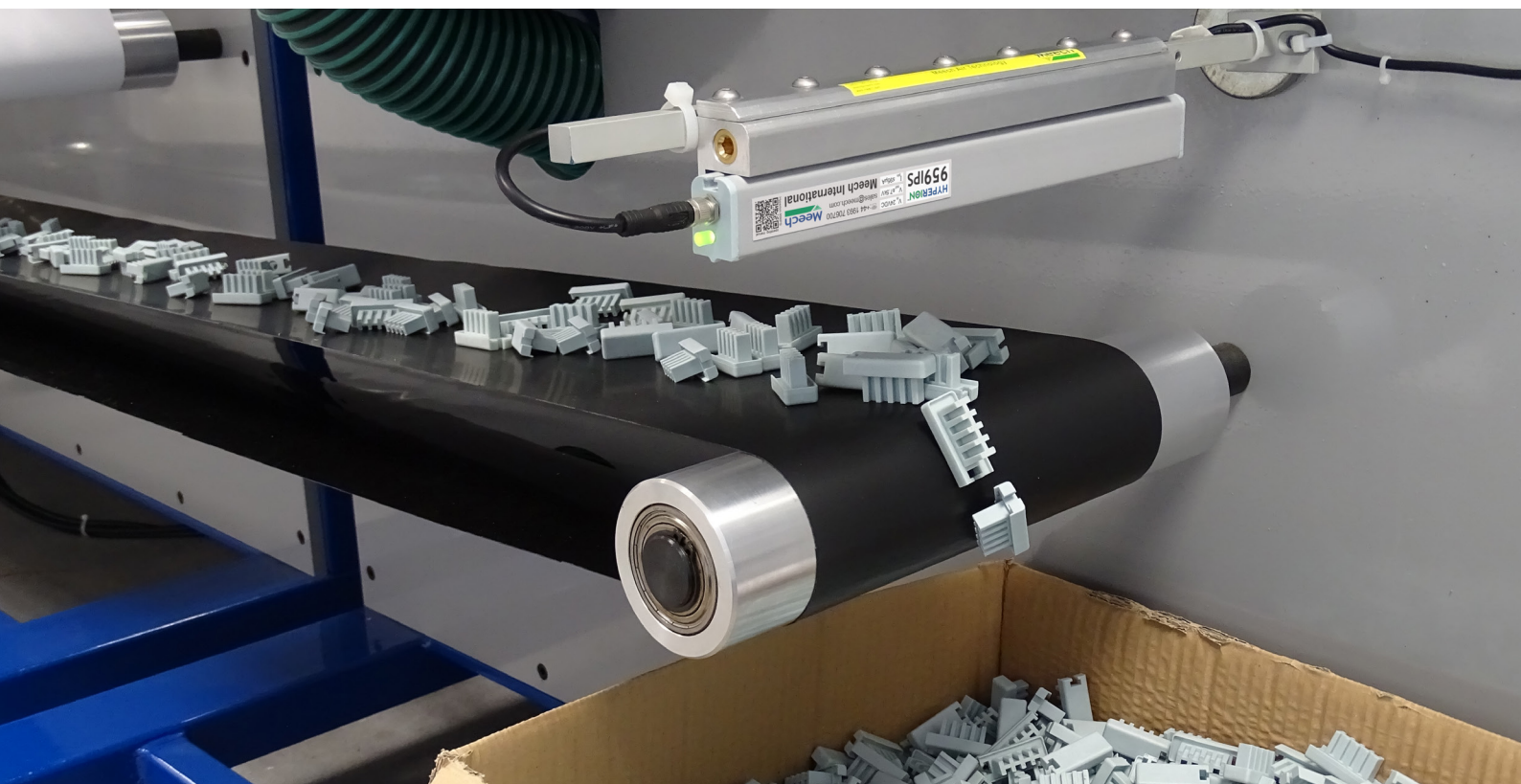


The Hyperion 959IPS ionising air curtain is an extremely versatile product that provides effective static neutralisation and dust removal for a wide range of industrial applications.

The unit comprises a Hyperion 924IPsv2 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 voltage, frequency and balance can be adjusted to optimise performance.





# Features & Benefits

## Optimum Operating Distance

20 to 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 24VDC 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

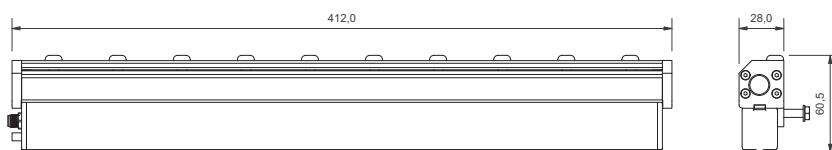
Meech Ion Current Monitoring (ICM) technology detects when the 924IPSV2 needs to be cleaned. The LED on the bar alerts operators of the need for cleaning. This ensures peak performance is maintained.

## 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.



All dimensions in mm

## Technical Characteristics

### Optimum Operating Distance

20 to 300mm

### Dimensions (WxH)

28mm x 60.5mm

### Maximum Length

1800mm

### Weight

2.1kg/metre

### Construction

FR ABS / Aluminium

### Input Current

Max 500mA

### Input Voltage

24V DC (21 to 27VDC)

### Output Voltage

Adjustable, 3 to 7.5kVDC Pos/Neg

### Electrical Connection

4-Pin, M8

### Output Frequency

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

### Output Balance

BarMaster or SmartControl adjustable between 80:20 to 20:80 Pos:Neg (Default 54:46 Pos:Neg)

### Environmental Protection

IP66

### Mounting

'T' Slot with M4 x 20mm studs

### Clean Pin Alert

0/24V

### Fault Alert

0/24V

### Max Ambient Temperature

60°C

### Air Curtain Connection

1/4" BSP

### Air Consumption

112 l/min at 5 bar per 25mm of length

### Emitters

Sharp titanium pins

# Hyperion SmartControl™ Touch

## Remote Monitoring and Control

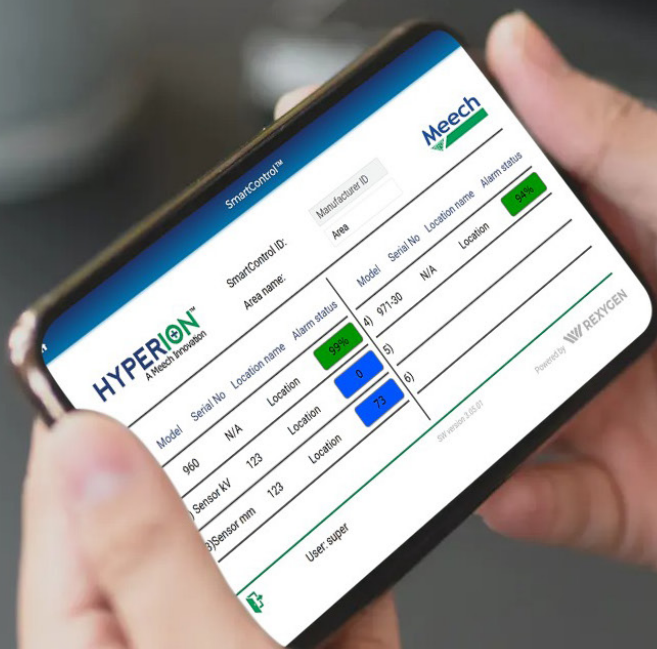
The Hyperion SmartControl Touch is the latest innovation from Meech. Designed to meet the needs of modern automated industries and harnessing Industry 4.0 technology to achieve maximum productivity and quality of output.



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. Optional PLC integration is also available with a range of industrial network protocols.

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. An additional 24 devices can be connected using the optional Extension Modules which increases the total to 30 different devices, all operating from one SmartControl Touch.



# Features & Benefits

## Remote Monitoring and Control

Makes quick and easy changes to connected devices.

## Connections

Only one SmartControl is needed for the central control of 6 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.

Voltage sensor: SmartControl- constantly monitors output from system and adjusts ionisation as required.

Distance: SmartControl- as above, changes frequency rather than output

## Data Logging

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

## Two Configurations

The SmartControl Touch comes with LAN (Local Area Network) as standard, or with the option of additional PLC industrial network connectivity.

## PLC Integration

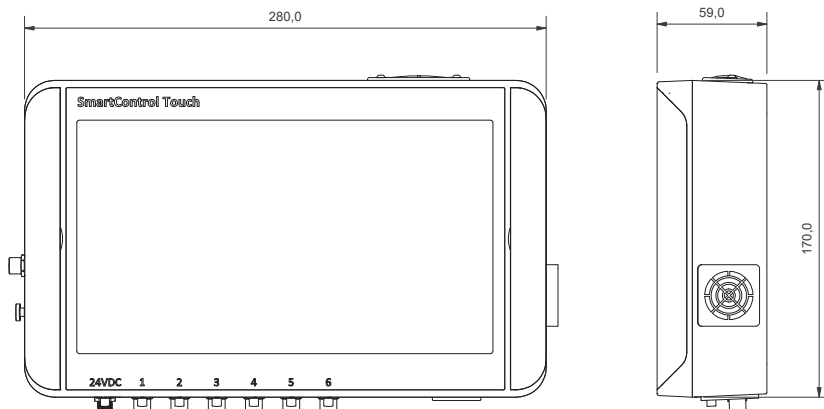
SmartControl Connectivity with PLCs for range of protocols including Profinet, EtherNet/IP, EtherCAT with Meech2PLC versions only.

## Alarm Output

Contact free alarm output to signal alarm status

## User-Friendly Interface

Clear and easy to use, with minimal training



All dimensions in mm

## Technical Characteristics

### Dimensions (WxHxD)

280mm x 170 mm x 59mm

### Weight

1.2kg

### Construction

ASA + PC + FR

### Input Voltage

24VDC

### Output Ports

6

### Electrical Connection

4-Pin, M8

### Connectivity

USB, RJ45, Plus optional industrial network connectivity

### Mounting

4x Case mounts

### Password Protection

Yes

### Input Power

96W Required



# Hyperion 936IPS Ionising Blower

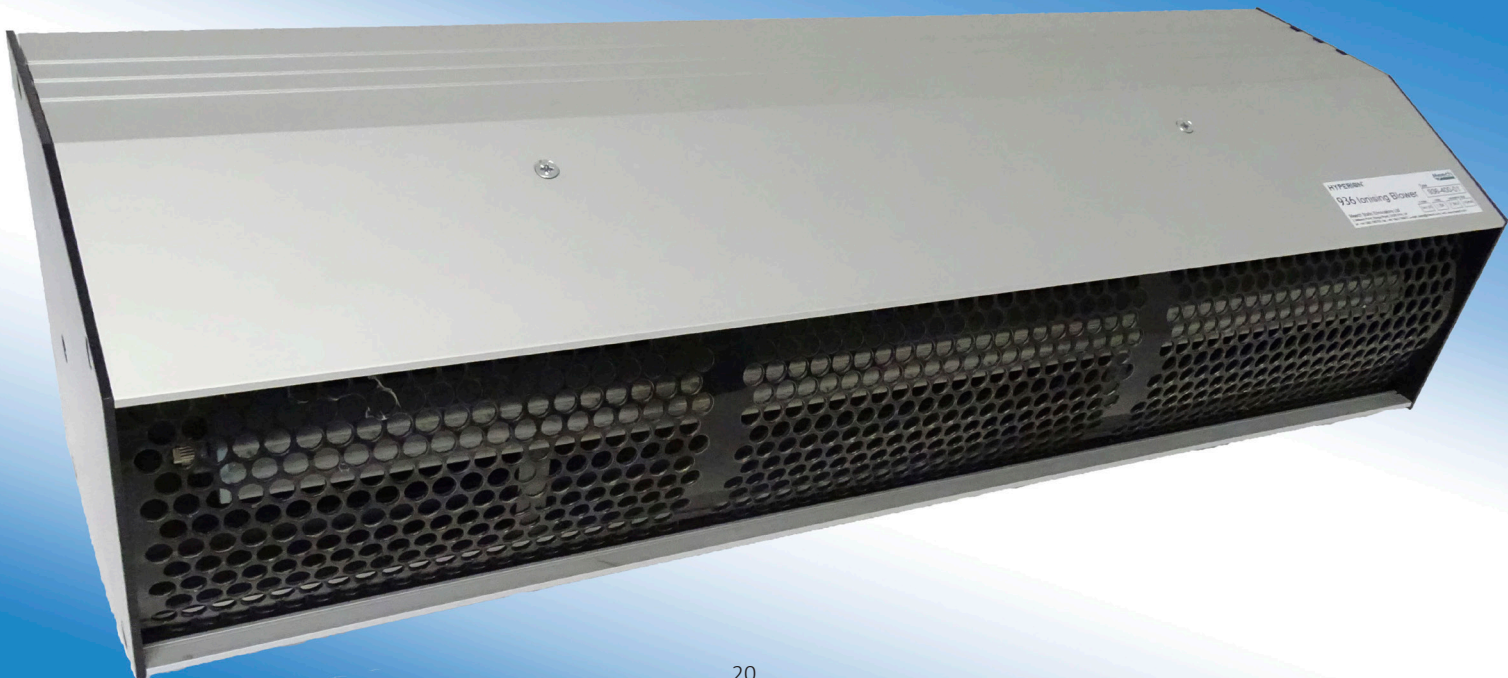
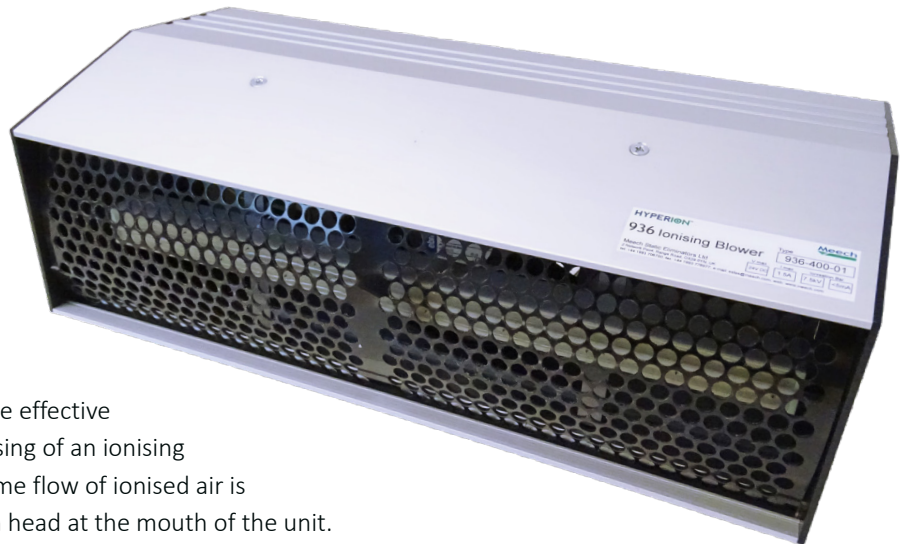
## Long Range Ionisation

The Hyperion 936IPS Blower replaces the 935 Blower and is the latest addition to the Hyperion family.

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 Meech 936IPS Blower is designed to provide effective long-range ionisation over a large area. Comprising 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 924IPsv2 bar, generating an operating range of up to 1200mm.

The 936IPS uses the same 4 pin M8 connector as the other Hyperion products. OEM customers can power the blower directly from their own 24V supply whereas end-users may prefer to buy a 24V switch mode power supply from Meech.



# Features & Benefits

## Ionisation Provided by 924IPSV2 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 24VDC 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 924IPSV2 ionising bar

## Adjustable Output

Output voltage, frequency and balance can be adjusted using the BarMaster programmer or SmartControl Touch.

## Mounting Brackets

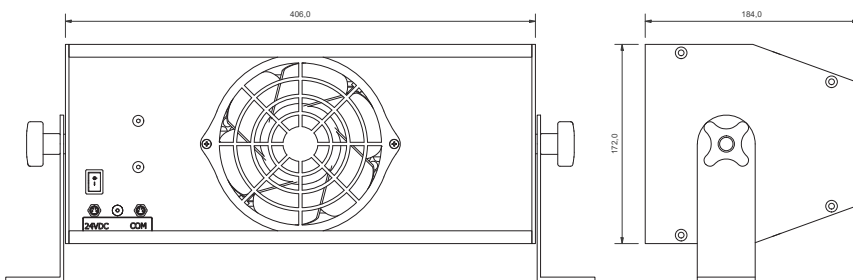
To enable mounting on walls, benches, ceilings etc. in order to suit any application

## Adjustable Clean Pin Alert

Detects when the ionising bar inside the 936 blower 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



All dimensions in mm

## Technical Characteristics

### Dimensions (WxH)

184mm x 172mm

### Operating Range

200 to 1200mm

### Weight

Approx 6.5kg (for 800m length)

### Construction

Bar = FR ABS

Blower = Extruded anodised aluminium body with steel plate ends

### Input Voltage

24VDC (21 to 27VDC)

### Maximum Ambient Temperature

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 4-pin connector on back panel

### Emitters

Sharp, titanium pins

### Available Lengths

300mm, 400mm, 600mm, 800mm, 1000mm, 1200mm

### Indicator LEDs

Green/red flashing LED on 924IPSV2 bar

### Controls

Voltage, balance and frequency controlled by BarMaster via M8 connector on back panel

# Hyperion IonCharge30

## 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.





# Features & Benefits

## 15 Watt Power Output

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

## Hyperion 24VDC Power Supply

24VDC 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 conjunction with machine operation.

## Multi-Language Support

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

## Colour Touch Screen User Interface

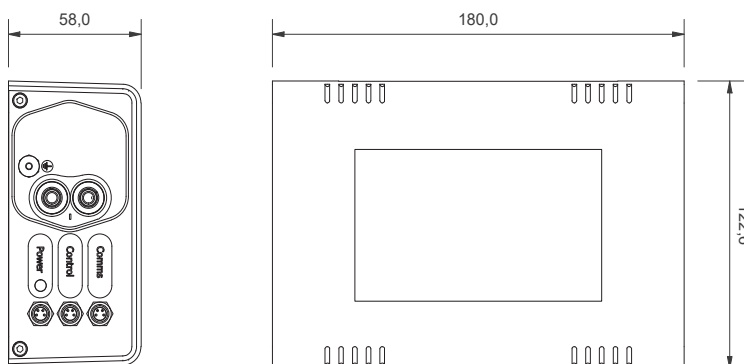
Clear and intuitive information display and simple input of settings.

## 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.



All dimensions in mm

## Technical Characteristics

### Dimensions (WxHxD)

122.6mm x 58mm x 180mm

### Weight

0.75kg

### Supply Voltage

21 to 27VDC

### Max Output Power

15W

### Output Polarity

Negative or positive variants available

### Adjustable Increments

Voltage (V) 1 to 30kV

Current (I) 0.01 to 0.5mA

### 4 to 20mA Control

Independent voltage and current inputs. Input resistance 1kΩ

### High Voltage Output

2 x Meech 30kVDC connection ports

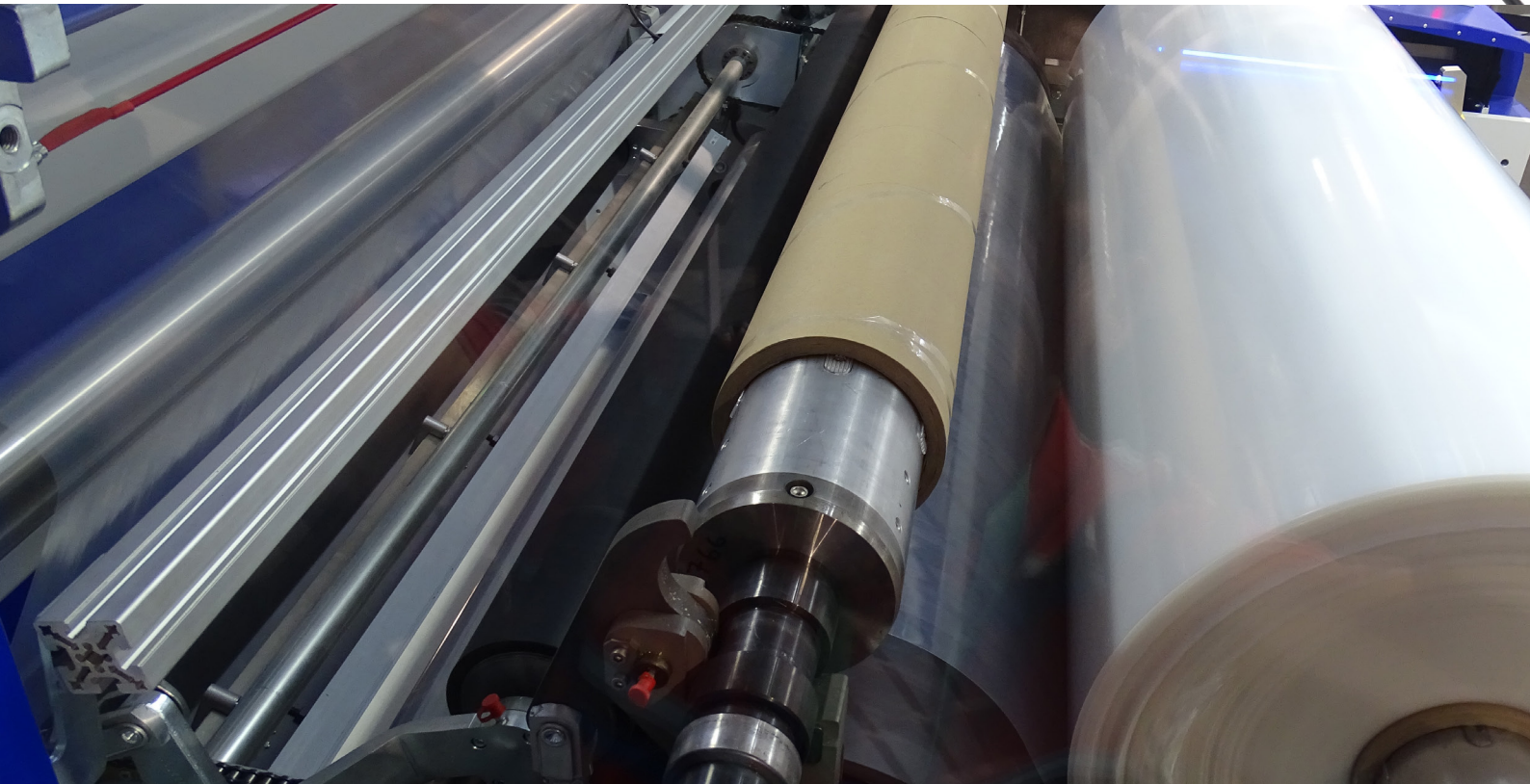
# Hyperion IonCharge50

## 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.



# Features & Benefits

## 75 Watt Power Output

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

## Hyperion 24VDC 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

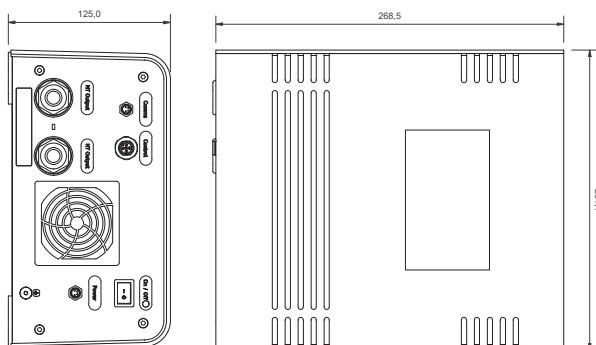
Clear and intuitive information display and simple input of settings.

## 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.



All dimensions in mm

## Technical Characteristics

### Dimensions (WxHxD)

231.4mm x 125mm x 268.5mm

### Weight

3.75kg

### Supply Voltage

24VDC or 240VAC

### Max Output Power

75W

### Output Polarity

Negative or positive variants available

### Adjustable Increments

Voltage (V) 0.1kV

Current (I) 0.01mA

### 4 To 20mA Control

Independent voltage and current inputs Input resistance 1k  $\Omega$

### HT Output

2 x Meech 50kVDC connection ports



# Hyperion PulseDrive Lite / Plus / Plus HL 5.5kV / Plus HL 9.0kV Pulsed DC Controller

The Hyperion PulseDrive Pulsed DC Controller is a compact and powerful 15kV controller. It was principally designed to directly power two Meech pulsed DC ionisers (e.g. 924S and 261v2). If more ionisers are required, they can be connected via splitters.

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

The PulseDrive 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.

Four versions of the PulseDrive are available. PulseDrive Lite and PulseDrive Plus are replacements for the 233v3 and 233v4 PDC controllers. The PulseDrive Plus HL 5.5kV is designed for use with 924Ex, and the PulseDrive Plus 9.0kV is designed for use with 976Ex.



**PulseDrive Lite**



**PulseDrive Plus**



# Features & Benefits

## 24VDC Input Voltage

The controller is powered by 24VDC 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.

## LED Indicator

Easy to see LED indicators. The colour and state of the LEDs, show whether the system is operating correctly or if it needs attention.

Plus versions include a digital display and keypad to make the most common adjustments to the units operation, without the need of a BarMaster / SmartControl.

## High Voltage Failure Alert

Local and remote alert of damage or high voltage 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

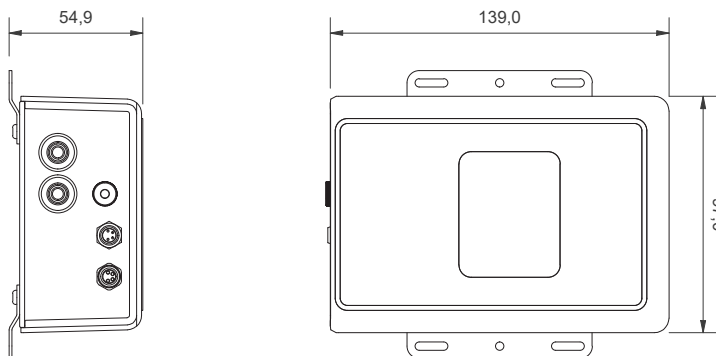
IP65 construction.

## Adjustments

The PulseDrive 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 PulseDrive Plus HL 5.5KV and PulseDrive Plus HL 9.0kV Pulsed DC Controllers are specifically designed for use in hazardous environments. Including the same features and benefits of the standard PulseDrive, the HL versions will be able to directly power two Meech DC Ex bars.



All dimensions in mm

## Technical Characteristics

### Dimensions (WxHxD)

97mm x 54.9mm x 139mm

### Weight

0.6kg

### Construction

FR ABS

### Output Current

0.625mA

### Input Voltage

24VDC (22 to 27VDC)

### Output Voltage

Adjustable, 2 to 15kV DC

HL Versions, 5.5kV & 9.0kV

### Output Balance

Adjustable, 80:20 to 20:80 Pos:Neg

### Output Frequency

Adjustable, 1 to 20Hz

### Connection

4-Pin, M8. Earth terminal

### Settings Control

BarMaster or SmartControl Touch

### LED Indication

Green/Amber/Red LEDs



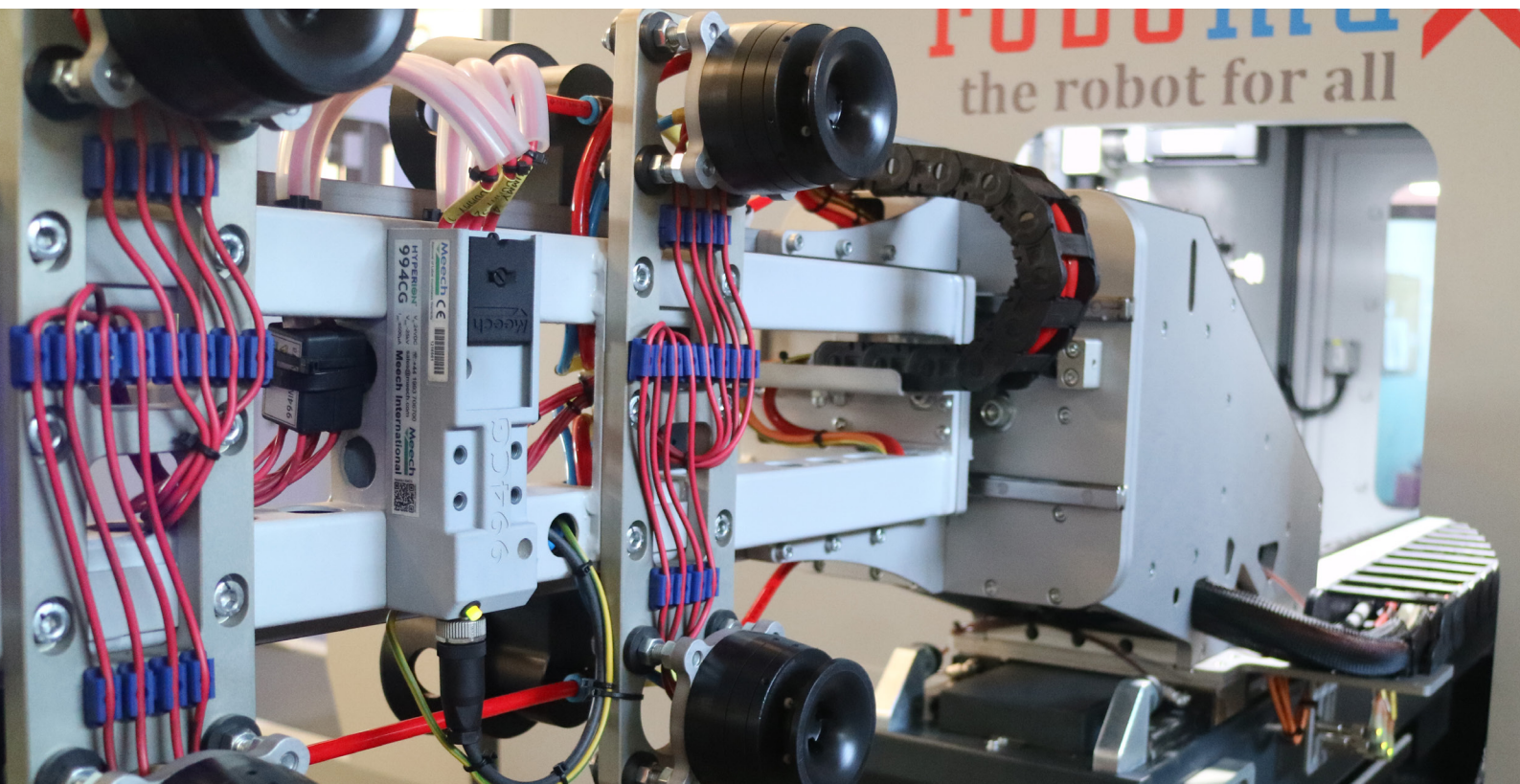
# Hyperion 994CG

## Compact IML Generator



The Hyperion 994CG Compact IML (In Mould Labelling) Generator is the first generator to be developed as part of the Hyperion range. Developed for the 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 25kVDC outlets, allowing the coupling of Meech 994 pinning heads without the need for a splitter whilst still maintaining its compact dimensions. Powered by a 21 to 27VDC supply it is one of the most powerful compact IML Generators available.





# Features & Benefits

## Low Voltage Wiring

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

## Compact Size

Allows installation directly on horizontal or vertical access robot arms.

## Adjustable Output

The 4 to 20mA setpoint input can be used to dynamically change the output voltage, this can be set using 994CG setpoint controller. However, a customer can also input that signal directly via a PLC. Alternatively, the default setpoint can be preconfigured using a Meech BarMaster.

## Technical Characteristics

### Dimensions (WxHxD)

45mm x 40mm x 170mm

### Weight

0.4kg

### Input Current

200 to 850mA Load dependant

### Input Voltage

21 to 27V DC - N.B. Supply must be grounded

### Output Voltage

4 to 25kV

### Connection

5-Pin, M12

### Settings Control

BarMaster or Remote Setpoint Control

### Setpoint

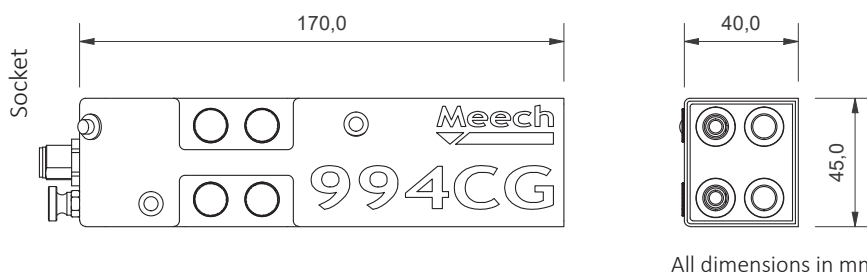
4 to 20mA, 1 to 5VDC

### Environmental Protection

IP66

### LED Indication

Green/Red LEDs



# Hyperion BarMaster

## Remote Programmer

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

The BarMaster temporarily connects in-line with the 24VDC power supply to the device/product and allows adjustment of various settings.

When programming is complete, the BarMaster is disconnected. Once switched back on, the Hyperion ionisers will continue operating at the programmed settings.



# Features & Benefits

## Universal

Hyperion BarMaster can be used to adjust the settings of any Hyperion product without it's own display (IC30, IC50, SmartControl, 994CG).

## Hand Held Programmer

Portable and easy to carry around.

## Frequency Adjustment

Frequency can be adjusted to suit different operating distances.

## Adjustable Output Voltage

Adjustable output optimises the bar for sensitive applications.

## 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

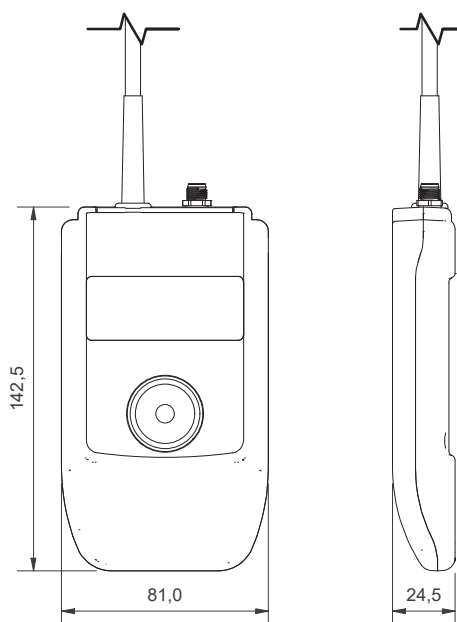
Clean pin alert setting can be changed to suit the demands of the application.

## Future Proof

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

## Protective Case

Supplied in easy to carry, hard-wearing case for secure and convenient storage and transportation.



All dimensions in mm

## Technical Characteristics

### Dimensions (WxHxD)

81mm x 142.5mm x 24.5mm

### Construction

ABS

### Cable Length

2000mm

### Input Voltage

24VDC

### Electrical Connection

4-Pin, M8





# 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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