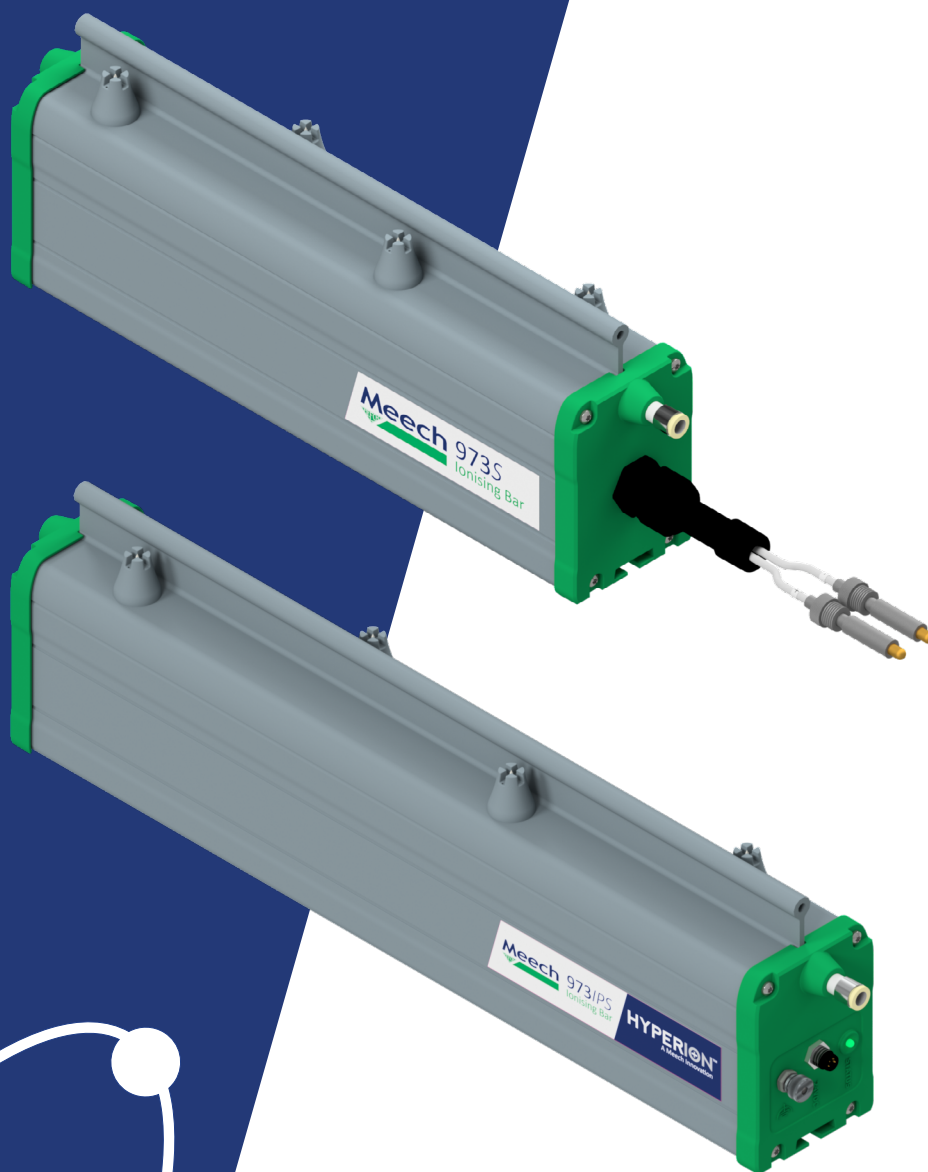


Operating Manual



HYPERION[™]
A Meech Innovation

973S & Hyperion 973IPS
Long Range Pulsed DC Bar

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1. Safety instructions

Before using this product, read the following safety and operating notes to ensure your own personal safety and to help protect your equipment. Failure to do so could result in injury. Connected equipment may require additional safety instructions. Observe all safety instructions for additional equipment before operating.

1.1. Definition of safety warnings & symbols

Safety and operating notes found in the document will be supplemented with the following warnings and symbols.

Safety warnings	Caution	A low-risk hazardous situation where minor or moderate injury can occur.
	Notice	A low-risk hazardous situation where damage to the equipment & products can occur.
Symbols	General hazard 	This symbol draws attention to a hazardous situation.
	Electrical shock 	This symbol draws attention to the risk of electrical shock.
	Notice 	This symbol draws attention where instructions must be followed.
	Referral 	This symbol instructs the reader to consult to a separate information source.

1.2. General safety

Before setting up the equipment:

- Read the operating instructions carefully and ensure you understand how to correctly use the equipment.
- Installation & testing must only be completed by suitably qualified personnel.
- Inspect the working environment and ensure it is clean and clear of hazards before removing equipment from packaging & product installation.
- Visually check all equipment for damage. If damaged, contact your local Meech representative before continuing.
- Always keep a copy of the operating manual close to the system to refer to.

1.3. Electrical safety

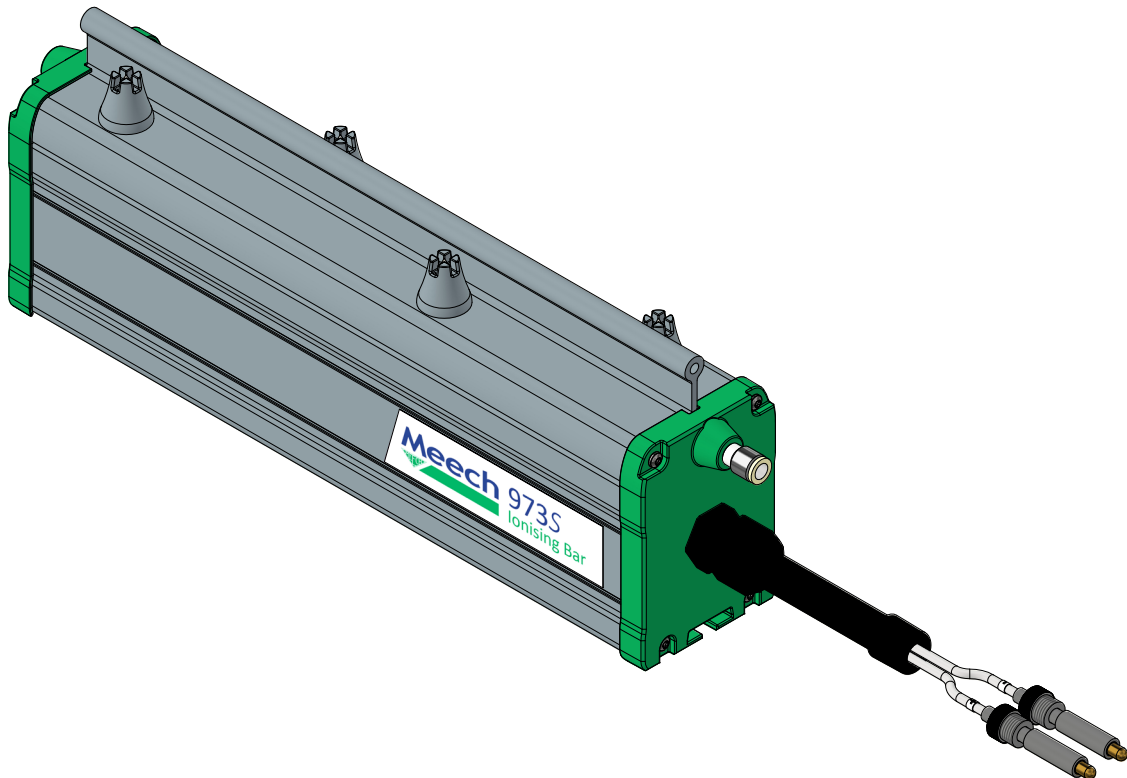
Before working on the equipment:

- Before installing or performing maintenance on the equipment, ensure the system is electrically isolated. Failure to do so could result in injury.
- Check the equipment and cables for any damage. If damaged, contact your local Meech representative before continuing.
- Ensure all wiring is completed by suitably qualified personnel.
- Check all wiring connections are correct in relation to the wiring diagrams later in this manual.

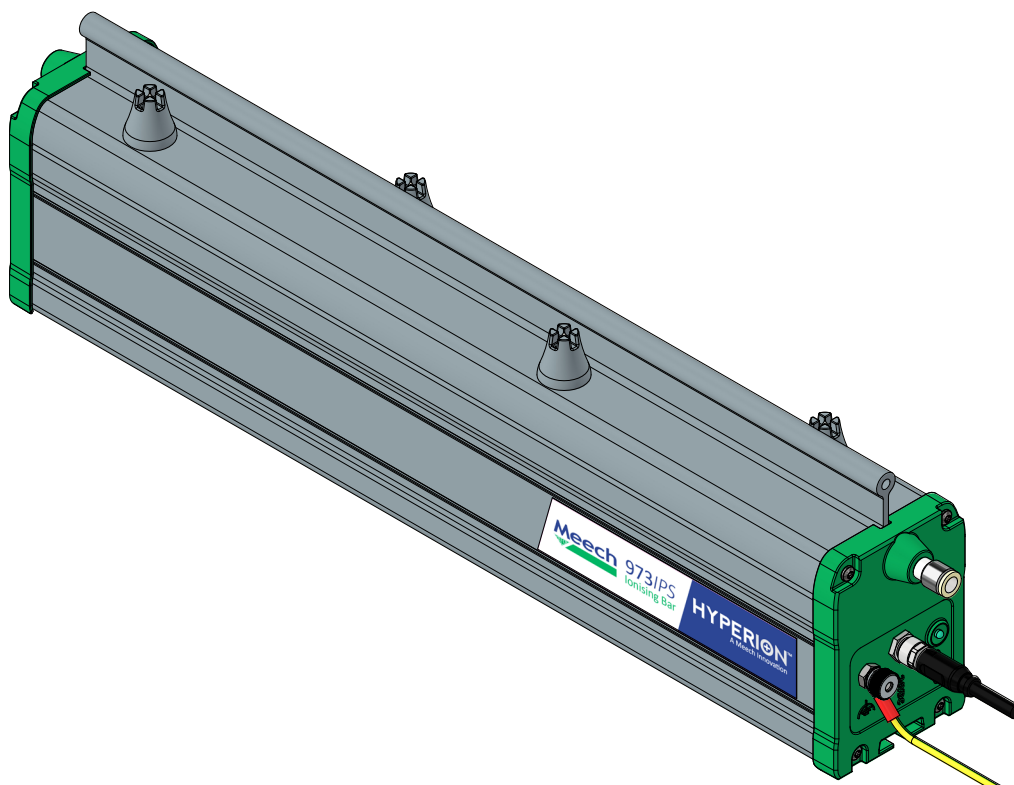
2. Introduction

The 973 series of long range pulsed DC bars are capable of long range ionisation using integrated air-boost and resistively coupled nozzles. The 973S is powered by a Hyperion PulseDrive, while the 973IPS operates from a 24 V DC supply.

Settings and configurations can be adjusted through the PulseDrive for the 973S, or a BarMaster/ SmartControl Touch for the 973IPS.



973S



Hyperion 973IPS

3. Package contents

Carefully examine the packaging and its contents before use. If damage is evident, do not destroy the packaging and immediately notify the carrier of a possible damage claim. Shipping claims must be made by the consignee to the carrier.

The following items will be found inside the product packaging:

Item	Product code	
973 Long Range Pulsed DC Bar*	Variant model code	Variant
	A973S-XXXX	973S
	A973IPS-XXXX	Hyperion 973IPS
Earth cable†	B-SP-D3310	
Mounting hardware	A973-FIXKIT-01	
Quick start guide	M0047	

Sold individually, † 973IPS only

3.1. Options

The following items can be purchased from Meech to supplement & provide extra functionality to the product.

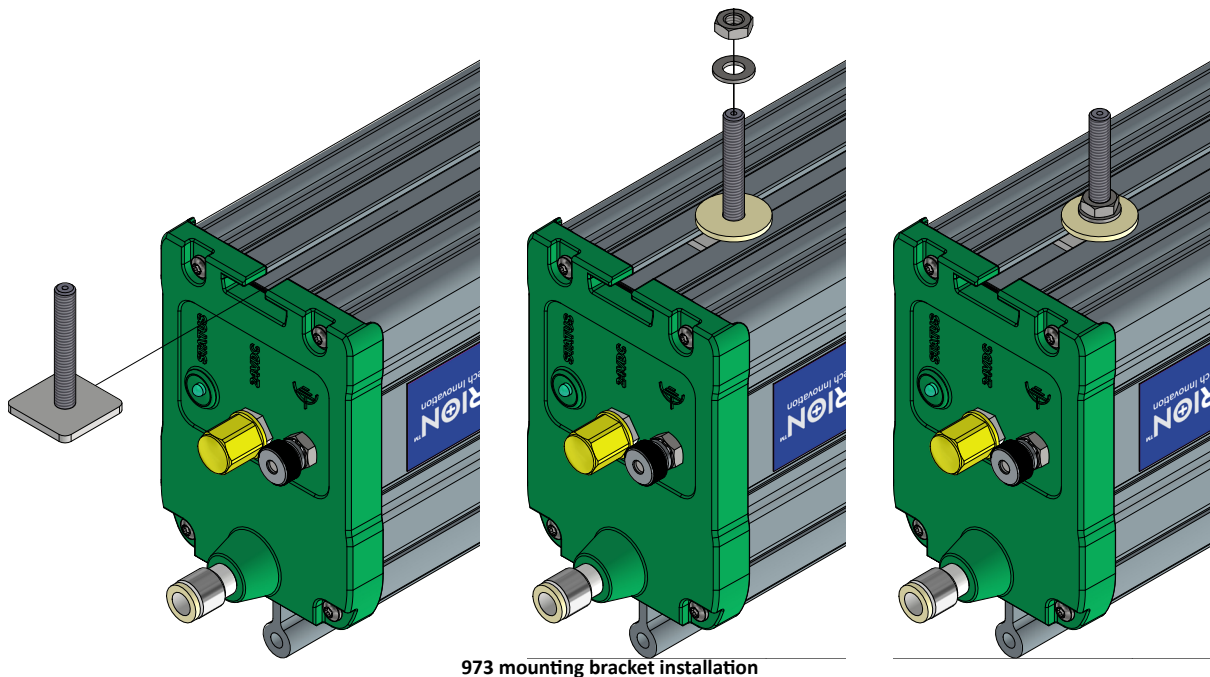
Item	Product code	
Hyperion PulseDrive PDC Controller <i>The PulseDrive controls and powers Meech pulsed DC ionisers, such as the 973S.</i>	Variant model code	Variant
	APD15-LITE-00	PulseDrive Lite
	APD15-PLUS-00	PulseDrive Plus
Switchmode power adaptor 60 W <i>Switchmode Power Adaptors take the local electrical supply and convert it to a stable and filtered 24 V DC output.</i>	Variant model code	Variant
	A900IPS-SM-60W-STRIP	Stripped Ends
	A900IPS-SM-60W-EURO	Schuko European
	A900IPS-SM-60W-UK	UK Plug
	A900IPS-SM-60W-USA	USA Plug
Hyperion BarMaster Remote Programmer <i>The BarMaster is a remote programmer used for changing parameters on Hyperion products.</i>	A900-BARMASTER-F	
Hyperion SmartControl Touch <i>SmartControl Touch allows the user to monitor, control and adjust the performance of multiple connected Hyperion ionising bars and sensors via the built-in touchscreen or remotely via PLC, tablet or remote desktop computer.</i>	ASmartCON-TOUCH-LAN	
4-Pole M8 2m connection cable <i>For connection of the unit to a customer's own 24 V DC power supply.</i>	A900IPS-PCS2 Contact your local Meech representative for options.	
Replacement emitter nozzles <i>Pack of 10 replacement emitter nozzles, complete with O-rings and a key to allow for easy removal and refitting.</i>	A973-PINSET	

4. Installation

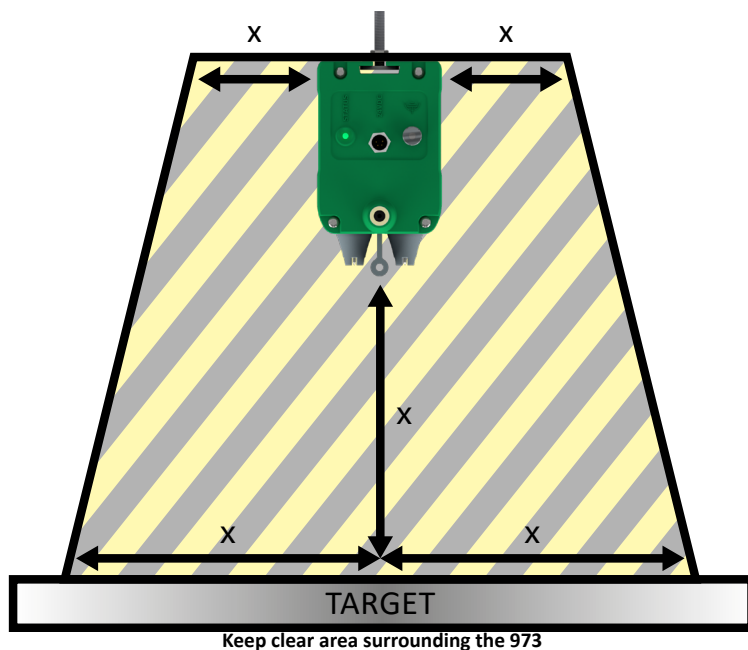
4.1. Mechanical installation

The product must be mounted securely using the supplied M5 hardware, which should be positioned along the bar as evenly as possible. A maximum of 500 mm should be between each bracket and a minimum of two brackets must be used.

1. Remove the fasteners from the mounting brackets.
2. Refit the nylon washer first, then tighten the M5 nut using an 8 mm spanner.



To ensure optimum performance, the bar must be positioned so there are no metallic objects or obstructions between it and the target material. The diagram below shows the area that must be kept clear, where x lengths are equal.



**Caution –
Risk of injury & equipment
damage**
Keep area indicated clear
of metallic objects or
obstructions.

4.2. Electrical connection



**Caution –
Injury due to electric shock.**

Before making any connections, ensure the product is electrically isolated.

4.2.1. 973S

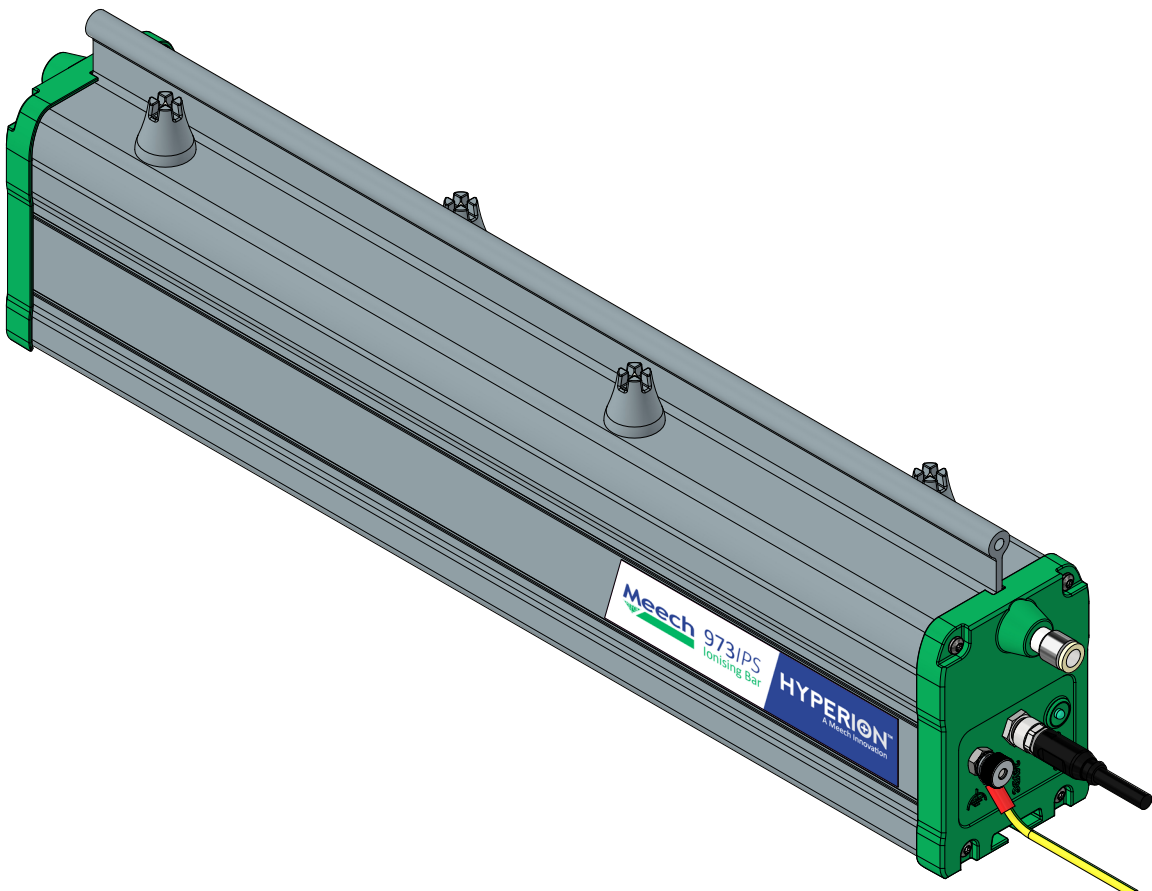
The 973S must only be connected to a Hyperion PulseDrive Lite or Plus. For correct installation, follow the connection steps in the PulseDrive operating manual M0038.



Please refer to the PulseDrive operating manual for more information.

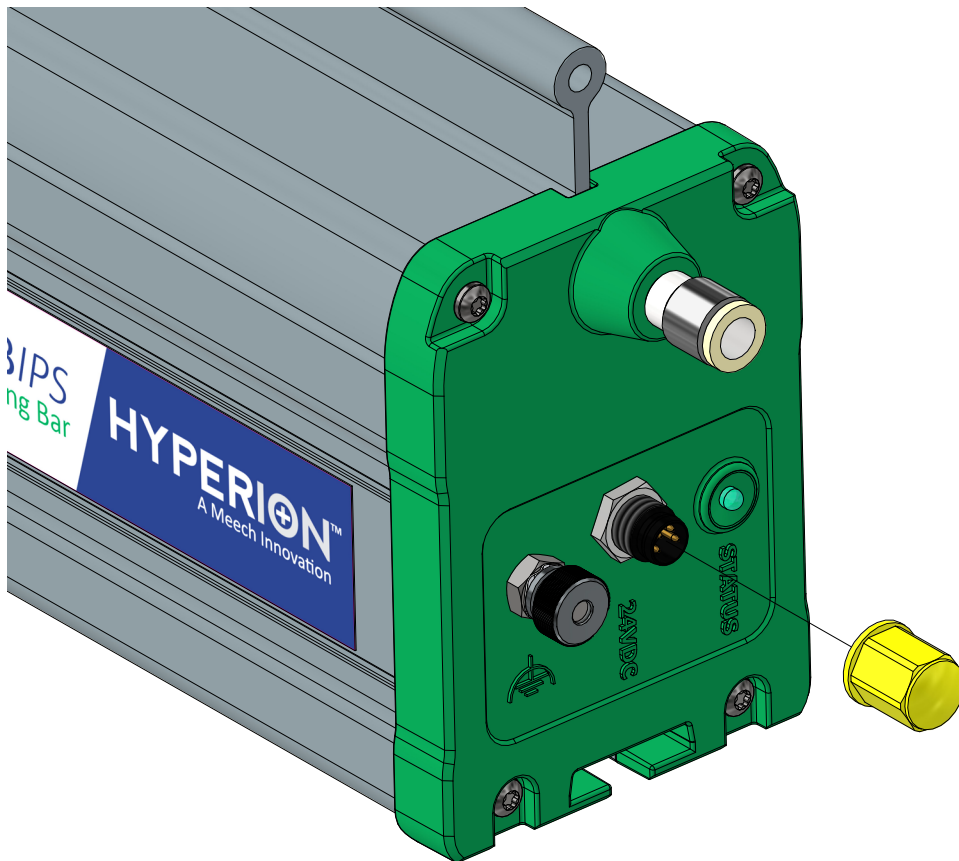
4.2.2. 973IPS

This section details how to connect the 973IPS to a power supply, BarMaster or SmartControl using the M8 4-Pole connector.

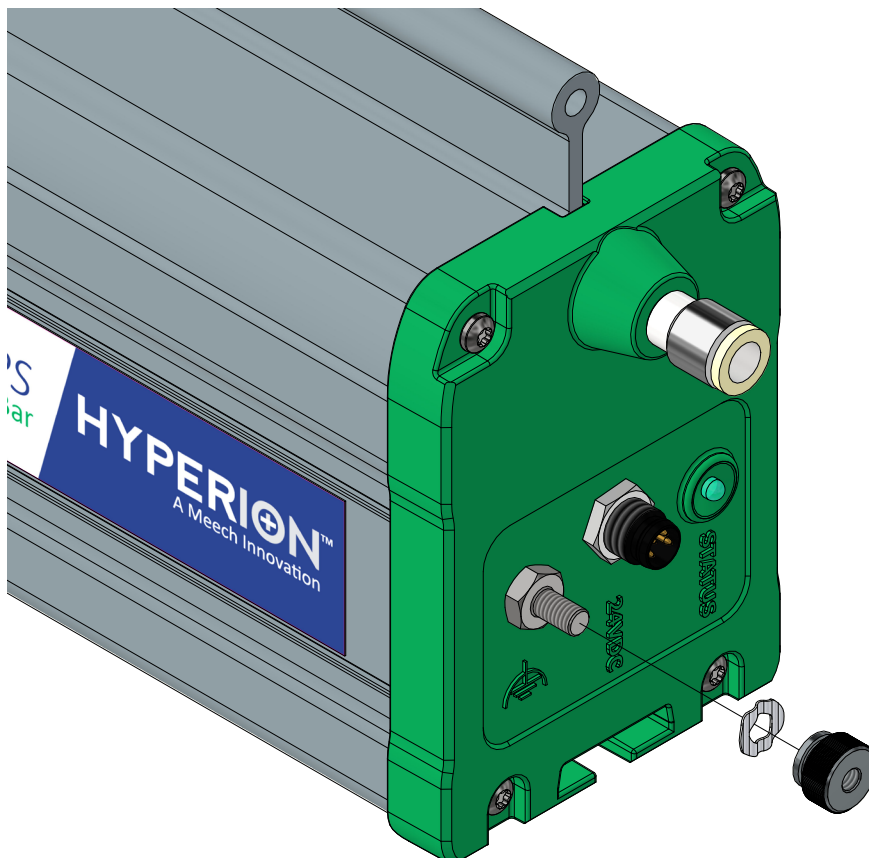


Example of a safe connection to 24 V DC

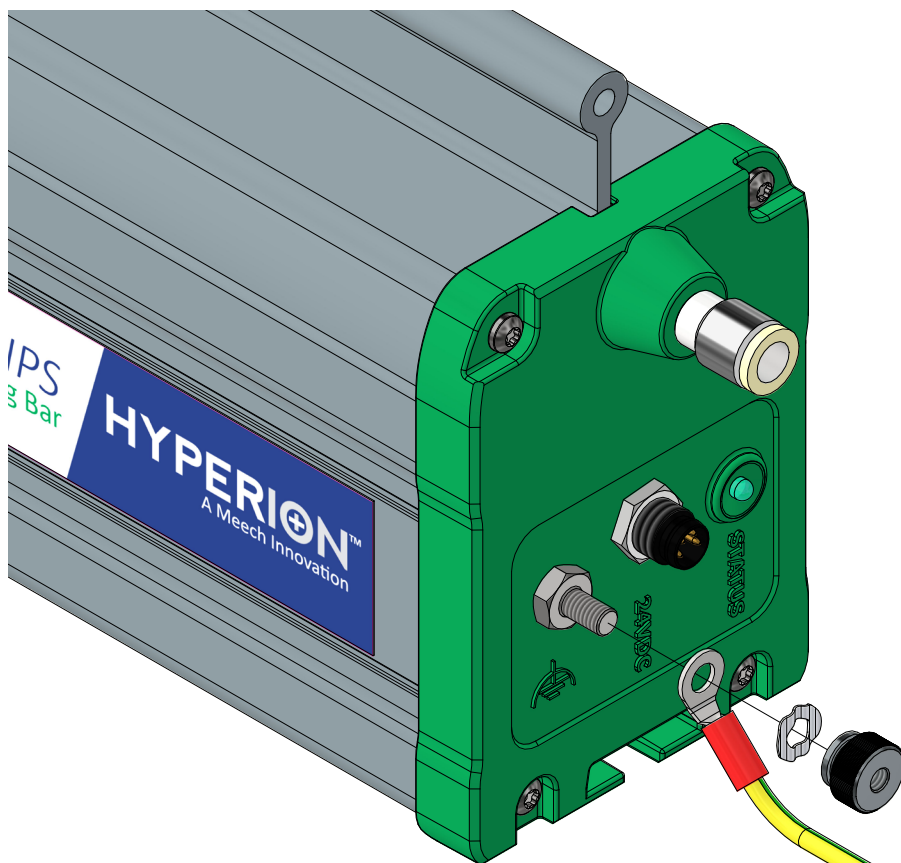
1. Remove the transit caps from the connector ports.



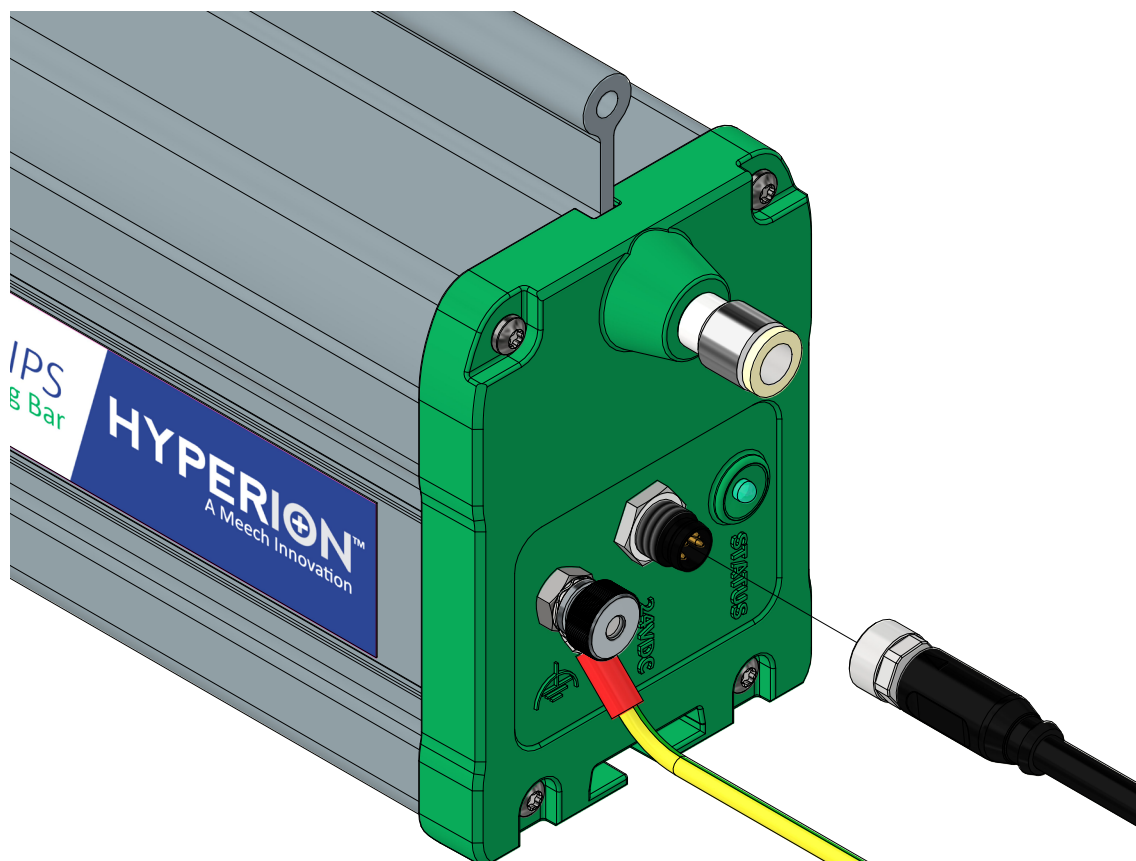
2. Remove the nut and crinkle washer from the earth post.



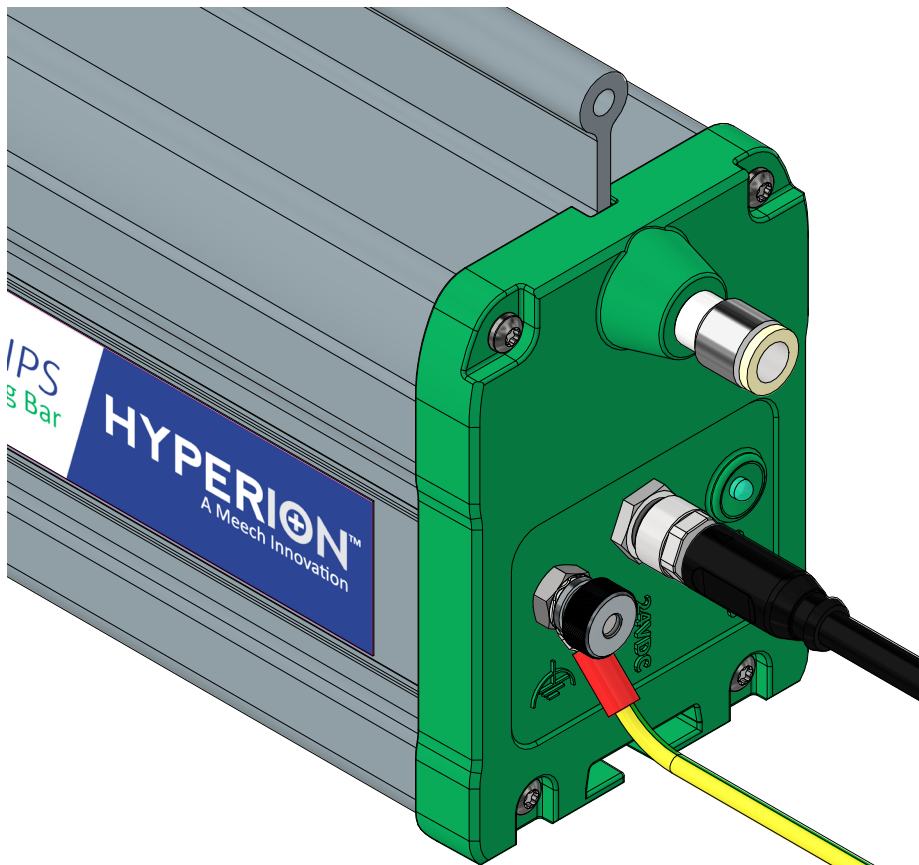
3. Fit the earth cable onto the earth post, then refit the nut and crinkle washer.



4. Fit the Power cable connector into the Power port.



5. The product can now be supplied with 24 V DC.



5. Grounding & 24 V DC supply

The 973IPS must be grounded through the power supply, as well as through the M4 earth post on the unit.

All power supplies used must be compliant with IEC62368-1 or IEC60950-1.



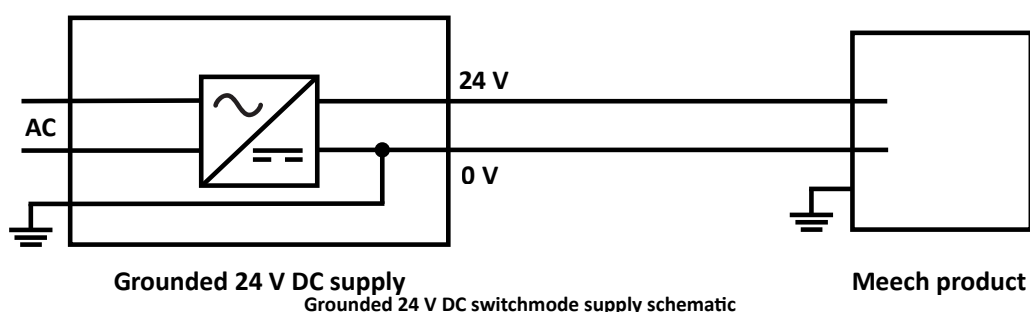
Notice –

The product must be electrically grounded.

Failure to do so may damage the equipment and will invalidate the warranty.

5.1. Meech 24 V DC switchmode power supply

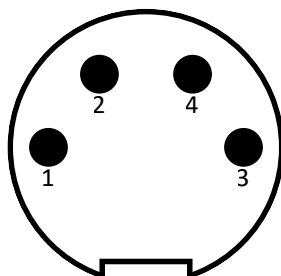
This refers to the use of a Meech 24 V DC 60 W switchmode to power the 973IPS, which is grounded internally & supplied with an IEC cable. See section 3.1 for product codes.



5.2. External 24 V DC power supply

It is the customers responsibility to check that the 24 V DC power supply being connected is grounded.

- The 24 V DC power supply must be protected with a 2 A fuse.
- Connection to the product is through the M8 4-Pole connector.



Male connector on the product, as viewed from the mating face.

Pin	Colour	Function	Specification
1	Brown	V_{in} (2 A max)	24 V DC (22 V to 28 V)
2	White	Alert output	0 V / 24 V DC
3	Blue	GND	0 V
4	Black	Fault output/standby input	0 V / 24 V DC

6. Operation

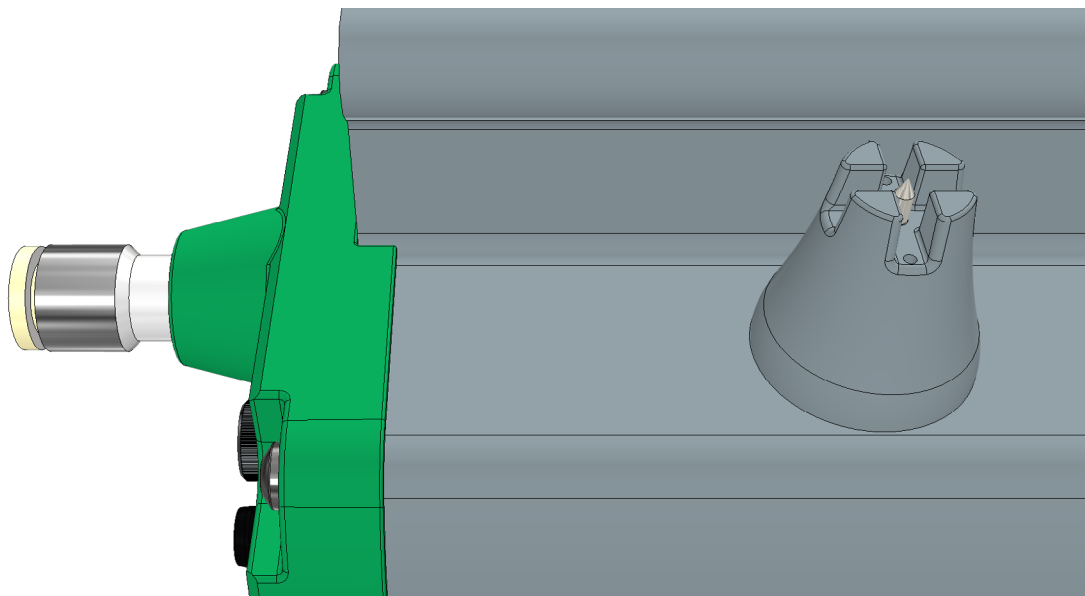
The 973IPS features a status LED that displays the units health and indicates any active alarms. A BarMaster or SmartControl Touch is required for adjustment of its output parameters.

6.1. Air-Boost

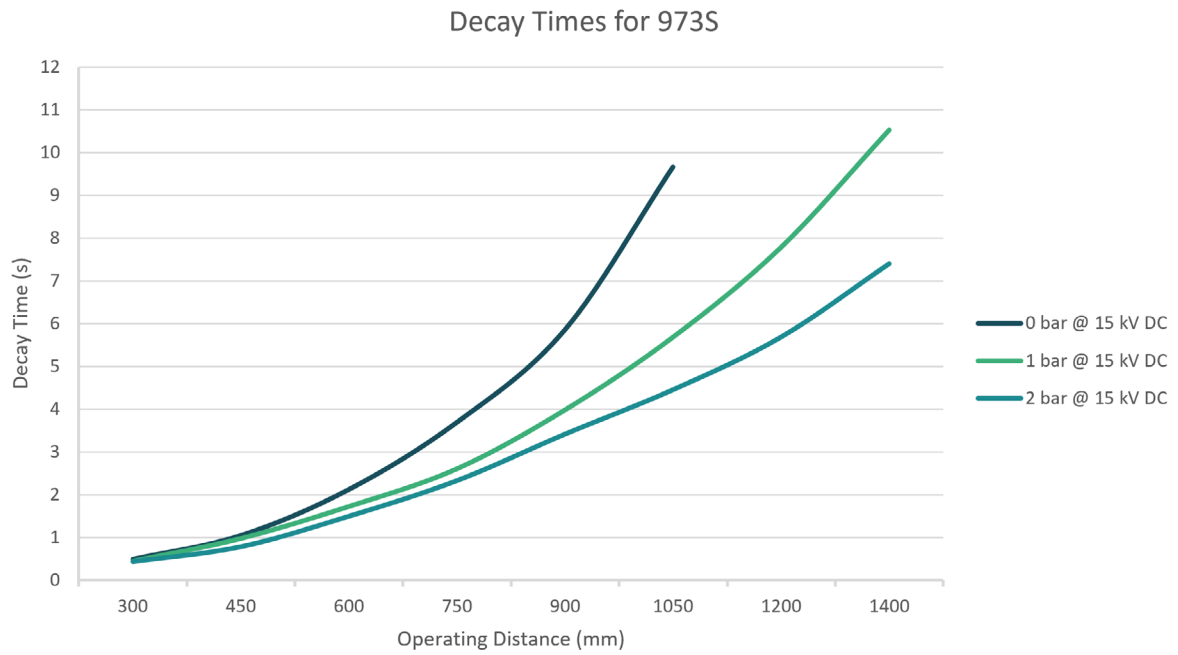
While the long range performance of the 973 is suitable for most applications, certain installations may require the use of air assistance to improve static control. Applying air pressure (up to a maximum of 2 bar) can increase decay speeds and extend the effective operating range.

Air outlets are positioned on opposite sides of the emitter nozzles, providing an integrated air-assist function and include pre-installed 6 mm push-fit connections for compressed air.

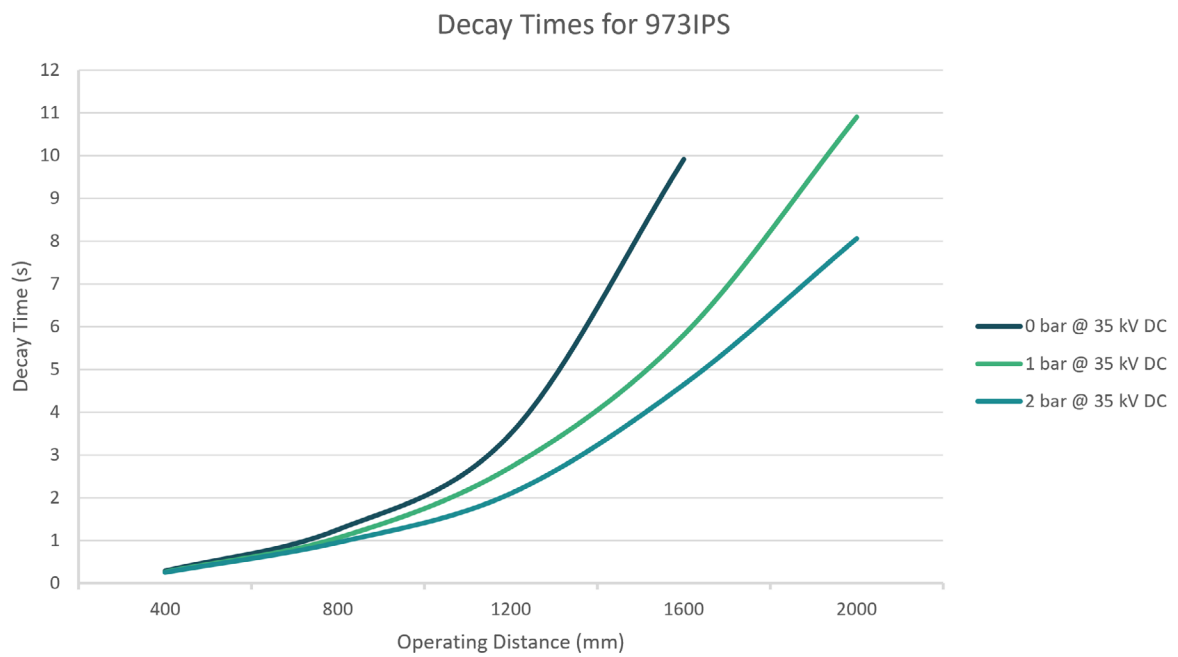
Bars under 2000 mm in length have a fitting at the connector end only, while bars 2000 mm and above have fittings at both ends.



6 mm push-fit connector and air-assist integrated emitter nozzles



Decay times for the 973S, running at 15 kV DC at 1 bar & 2 bar



Decay times for the 973IPS, running at 35 kV DC at 1 bar & 2 bar

6.1.1. Replacement emitter nozzles

The emitter assembly is a one-piece moulding with an integrated titanium emitter pin. It includes a castellated guard to reduce the risk of contact with the pin and to allow access for routine cleaning using a brush.

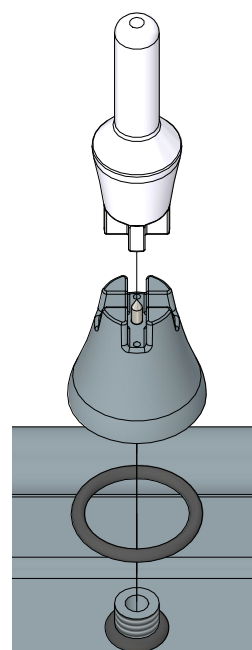
Replacement emitter nozzles are sold separately in packs of ten and include a tool for easy removal and refitting.

1. Remove the nozzle by unscrewing it using the supplied tool.
2. Fit the new outer O-ring.
3. Install the replacement nozzle and fully tighten to compress the seal.



Caution – Sharp object

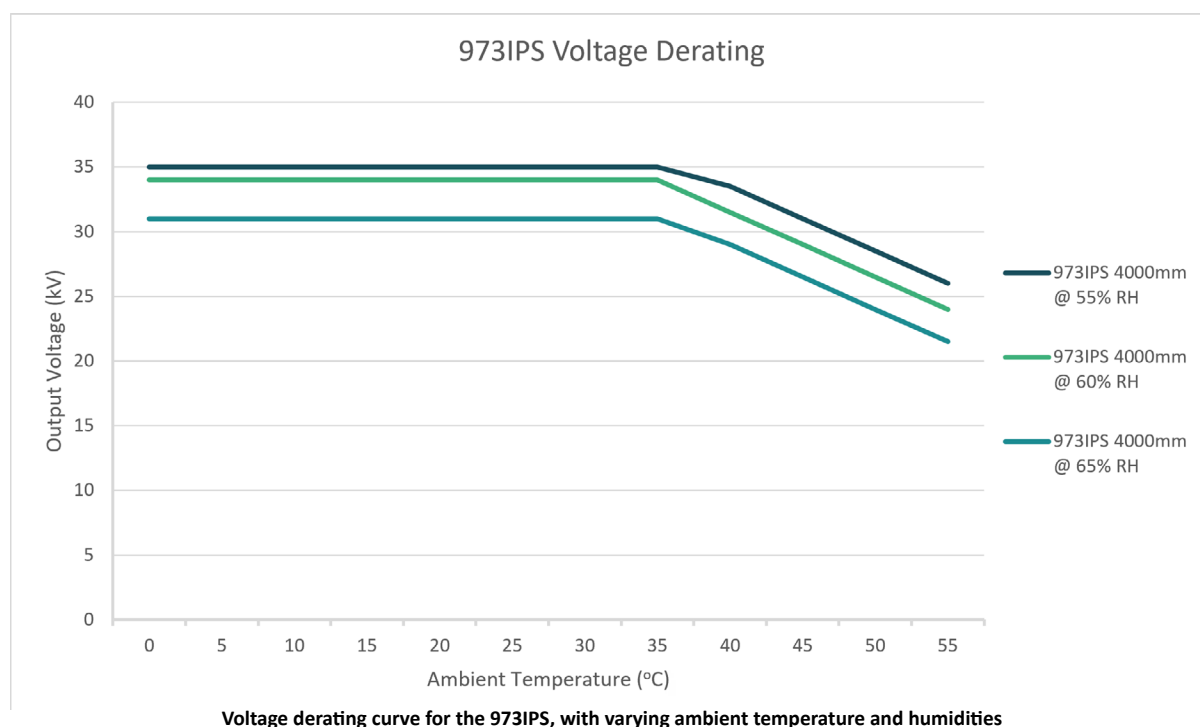
The emitter pins are sharp, handle with care.



6.2. Power derating

The 973IPS has internal temperature monitoring. Dependant on the ambient temperature and humidity, the output may automatically derate to improve device reliability at high voltage ranges.

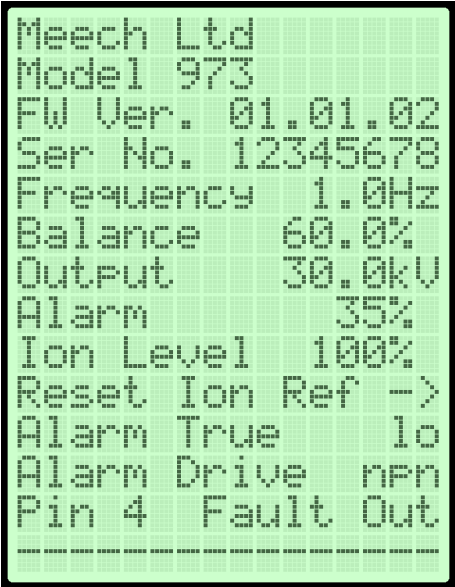
When power derating is occurring, the status LED will signal the appropriate Real Time Fault Monitoring (RTFM) code to help identify the cause. See section 7.1.1 for RTFM codes.



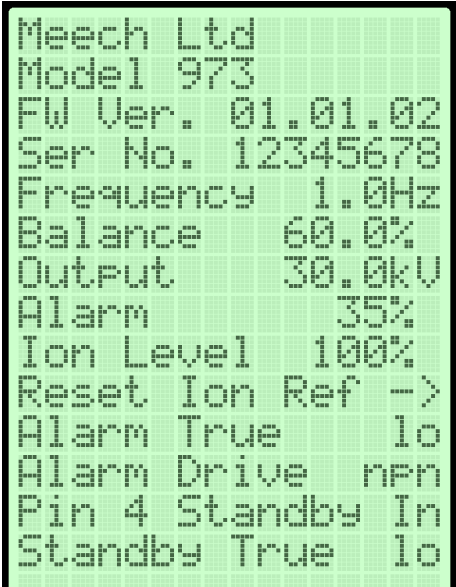
6.3. Using a BarMaster

The BarMaster is connected inline with the 24 V DC power supply cable for the 973IPS. Attach the 24 V DC power cable to the BarMaster, then fit its cable to the 24 V DC input port. When finished, disconnect the BarMaster and reconnect the 24 V DC to the product.

When powered, the screen will display data similar to below. The arrows keys on the BarMaster keypad can be used to navigate through and adjust the output parameters.



Pin-4 set to Fault output



Pin-4 set to Standby input

BarMaster keypad		
Up		Press to cycle through the parameters
Down		
Left		Press to adjust the parameters
Right		
OK		This button is redundant and has no function



Please refer to the BarMaster operating manual for more information.

6.4. Using a SmartControl Touch

The SmartControl Touch is powered by 24 V DC and supports direct connection of up to six devices. When used with extension units, up to 30 Meech Hyperion devices can be connected. The output parameters can be adjusted by simply touching the values.

With the product connected, its touchscreen will display a screen similar to below.

HYPERION™ A Meech Innovation		SmartControl™		Meech	
Connection port:		3			
Location Name		Location			
Model and Version		973, FW Ver. 01.01.02			
Serial No		00000001			
Frequency	1 Hz	Reset Ion Level	OK		
Balance	50 %	Standby Off	☐		
Output	35 kV	Status Ok/Run	0 RTFM		
Alarm Level	35 %				
Ion Level	100 %				
User: admin		Comms Alarm: ☐		Powered by REXYGEN	

SmartControl Touch user interface



Notice –
Ensure the product is correctly configured before connecting the SmartControl Touch.

Pin-4 of the 24 V DC input port is to fault output by default.
Before connecting a SmartControl Touch, ensure that Pin-4 is set to fault output.



Please refer to the SmartControl Touch operating manual for more information.

6.5. Modifying the output parameters

6.5.1. Frequency

The output frequency of the product depends on the distance to its target. Over a longer range, positive and negative ions may recombine before reaching the target if they are not emitted for a long enough time. To prevent this, a close-range ioniser requires a higher frequency, while a long-range ioniser operates more effectively at a lower frequency.

6.5.2. Balance

For industrial applications, where speed of charge control is important, the balance can be adjusted to increase the speed of charge removal. For example, if the target material carries a high negative charge, the balance can be adjusted to produce more positive ions.

6.5.3. Voltage

The voltage must be set dependent on the distance between the ioniser and the target material. For example, a close range or delicate application relies on a lower output voltage, whereas a longer range or heavily charged target will require a higher output voltage.

6.5.4. Ion reference alarm

The performance of a connected ioniser can be measured by monitoring the ion reference percentage. A brand new, clean ioniser will read as 100% on a BarMaster or SmartControl Touch.

Over an ionisers life time, its emitter pins will gradually wear down and dirt will accumulate on both the pins and its body. This will reduce the ionisers performance, and will decrease the ion reference percentage. A low ion current alarm will trigger when its performance drops below the factory preset of 35%. The status LED will flash red, and an alarm signal will be sent from Pin-2 (white) of the 24 V DC input port. This alarm level can be changed by a BarMaster or SmartControl Touch.

As part of regular maintenance, it is recommended to clean both the emitter pins and the body of the ioniser. Regular cleaning will restore the ion reference percentage, extend the ionisers lifespan and ensure optimal performance.

6.6. Remote control

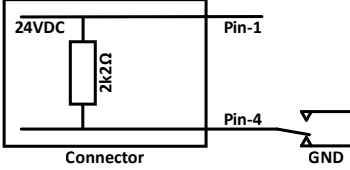
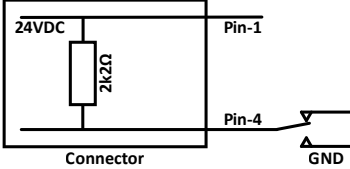
The 973 can be switched in and out of standby remotely. The 973S needs a PulseDrive for this, while the 973IPS can be controlled with the 24 V DC input, a BarMaster, or SmartControl Touch.

6.6.1. 24 V DC input port

By adjusting the “Standby True” setting with a BarMaster, standby mode can be toggled when Pin-4 (black) is grounded.

If set to Hi, standby is enabled when Pin-4 (black) **is not** grounded.

If set to Lo, standby is enabled when Pin-4 (black) **is** grounded.

	Standby True = Lo (Default)	Standby True = Hi	
Pin-4 (black) connected to ground	Standby is enabled	Standby is disabled	
Pin-4 (black) disconnected from ground	Standby is disabled	Standby is enabled	

Pin-4 is pulled up internally to 24 V DC by a 2.2 kΩ resistor.

6.6.2. Software

Once the product is connected to a SmartControl Touch through the 24 V DC input port, standby mode can be toggled through its interface as seen below (circled).

SmartControl™

HYPERION™
A Meech Innovation

Connection port: 3

Location Name Location

Model and Version 973, FW Ver. 01.01.02

Serial No 00000001

Frequency 1 Hz

Balance 50 %

Output 35 kV

Alarm Level 35 %

Ion Level 100 %

Position Level

Standby Off

Status 0 RTFM

User: admin

Comms Alarm: ☐

Powered by REXYGEN

Standby mode off



Please refer to the SmartControl Touch operating manual for more information.

7. Monitoring

The 973IPS continually monitors its internal health and can trigger an alarm should any parameter fall outside a predetermined range. Alarms can be monitored either via the status LED, or through the alarm outputs.

Alarms and operational status for the 973S can be observed on its connected PulseDrive Controller.

7.1. Status LED

The LED colour combinations are below. If the product has a fault, perform the *corrective actions* above then cycle power to reset the unit.

LED colours	Alarm status	Description - <i>corrective actions</i>
Green 	 Normal	Normal operation
Yellow 	 Normal	Standby - HV output is off
Flashing green 	 Normal	Normal operation - BarMaster/SmartControl connected
Flashing yellow 	 Normal	Standby - HV output is off, BarMaster/SmartControl connected
Red 	 Fault	HV overcurrent - <i>Check outputs/reduce load</i>
Flashing red 	 Alert	Low ion current - <i>Check for contamination</i>
Flashing green/red 	 Fault	Internal issue - <i>Restart the device</i>
Flashing red/yellow 	 Fault	Real Time Fault Monitoring (RTFM) - <i>Refer to section 7.1.1.</i>
Flashing green/yellow 	 Alert	Real Time Fault Monitoring (RTFM) - <i>Refer to section 7.1.1.</i>

7.1.1. Real Time Fault Monitoring codes

The following RTFM codes may be observed on the status LED of the 973IPS or PulseDrive to provide a more detailed alarm overview. The LED will flash green or red with up to 5 yellow flashes, to display different fault codes.

LED colours	Alarm status	Description – <i>Corrective actions</i>
Green & 2 yellow flashes 	Alert	HV output: Approaching current limit – <i>Reduce output load</i>
Green & 3 yellow flashes 		24 V DC power supply: Approaching under voltage – <i>Check power supply</i>
Green & 5 yellow flashes 		Internal temperature: Approaching temperature limit – <i>Ensure the product has sufficient cooling</i>
Red & 2 yellow flashes 	Fault	HV output: Reached current limit – <i>Reduce output load</i>
Red & 4 yellow flashes 		24 V DC power supply: Reached over voltage – <i>Check power supply</i>
Red & 5 yellow flashes 		Internal temperature: Reached temperature limit – <i>Ensure the product has sufficient cooling</i>

7.2. Remote monitoring

7.2.1. Alarm outputs

Remote alarm monitoring is provided by Pin 2&4 of the 24 V DC input port. These alarm signals output either 0 or 24 V and are suitable for direct connection to a PLC input, or to control an external 24 V relay.

- **Alert (Pin-2 white)**
This pin is used to report when attention may be required.
- **Fault (Pin-4 black)**
This pin is used to report when there is a fault, and the output has been shut off - unless configured as standby input.

On power-up, Pin 2&4 will remain in Hi state for up to 60 seconds before they are used as outputs.

Note: When a BarMaster remote programmer is connected, alert and fault outputs are temporarily disabled.

7.2.2. Alarm output drive options

Using a BarMaster, the alarm output can be configured to meet most requirements. As standard, the 973IPS will be supplied with a factory preset configuration of Output drive = NPN, where Alarm True = Lo.

The output drive options are designed to allow easy integration with most PLC equipment, and are compatible with IEC 61131-2 type 1,2,3 plc inputs.

1. **Output drive = NPN** – 24 V is supplied via an internal 2.2 kΩ resistor, 0 V DC is supplied directly.*
2. **Output drive = PNP** – 24 V is supplied directly, 0 V DC is supplied via an internal 2.2 kΩ resistor.*
3. **Output drive = N+P** – Both 24 V DC & 0 V DC are supplied directly.†

The output polarity (Alarm True) can be set to go to Hi (24 V DC) or Lo (0 V DC) when there is an issue.

	Alarm True = Lo	Alarm True = Hi
Fault detected	0 V DC	24 V DC
No fault detected	24 V DC	0 V DC

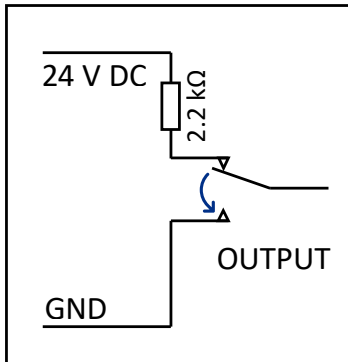
* = Using NPN (default Hi) or PNP (default Lo) allows for multiple products to be connected in parallel, triggering a common alert without interfering with each other's operation.

† = Using N+P **does not** allow for any products to be connected in parallel.



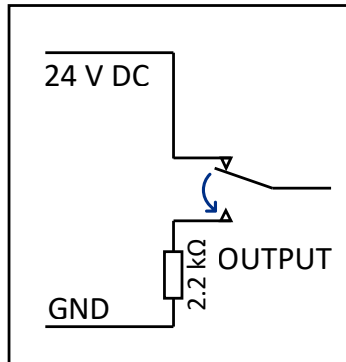
Please refer to the BarMaster operating manual for more information.

**Output Drive = NPN
Alarm True = Lo**

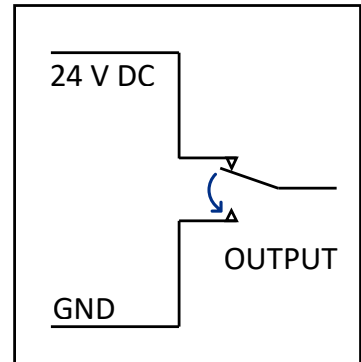


Default: Can be used with multiple devices in parallel.

**Output Drive = PNP
Alarm True = Lo**

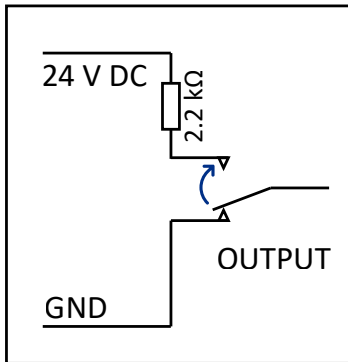


**Output Drive = N+P
Alarm True = Lo**

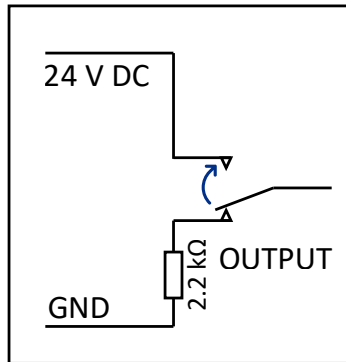


When Alarm True = Lo, OK = 24 V DC & Alert/Fault = 0 V DC

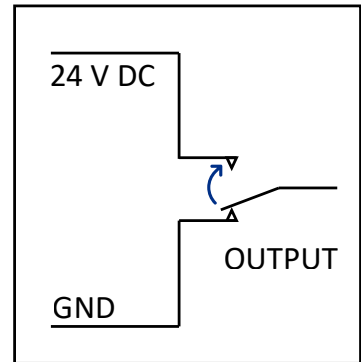
**Output Drive = NPN
Alarm True = Hi**



**Output Drive = PNP
Alarm True = Hi**



**Output Drive = N+P
Alarm True = Hi**



On power on, the output signal stays high for 60 seconds, so Alarm True=Hi may cause issues on power cycle.

When Alarm True = Hi, OK = 0 V DC & Alert/Fault = 24 V DC

8. Technical & construction data

Physical Characteristics		
Available Lengths	973S	300 mm to 3900 mm (in 150 mm intervals)
	973IPS	400 mm to 4000 mm (in 200 mm intervals)
Width x Height	64 mm x 110 mm	
Weight	973S	Approx. 1.9 kg/metre
	973IPS	Approx. 2.3 kg/metre
Mounting	T-slot with M5 x 35 mm studs	
Construction		
Enclosure	FR ABS	
Protection Class	IP54 construction	
Maximum Ambient Temperature	55°C	
Supply		
Input Voltage	973S	2 kV DC to 15 kV DC
	973IPS	24 V DC (22 V DC to 28 V DC)
Input Current	973S	0.65 mA maximum
	973IPS	1.5 A maximum
Electrical Connections	973S	2x HV connectors (1 Pos, 1 Neg)
	973IPS	4-Pole M8
Air-Boost Connection	6 mm push-fit	
Air Pressure	Typical: 1 bar; Maximum: 2 bar	
Maximum Air Consumption	Bar lengths <2000 mm: 105 L/min @ 1 bar, 159 L/min @ 2 bar	
	Bar lengths 2000 - 4000 mm: 209 L/min @ 1 bar, 310 L/min @ 2 bar	
Output		
Output Type	Pulsed DC	
Output Voltage	973S	± 15 kV DC (2 kV DC to 15 kV DC)*
	973IPS	± 30 kV DC (6 kV DC to 35 kV DC) †
Output Frequency	973S	1 Hz (1 Hz to 20 Hz)*
	973IPS	1 Hz (0.5 Hz to 9.5 Hz)†
Output Balance	60% positive (20% to 80%)*†	
Emitters	Removable titanium shockless pins	
Suggested Operating Range	973S	150 mm to 750 mm
	973IPS	450 mm to 1500 mm
Monitoring and Control		
Local Indication	Green/yellow/red LED	
Alarm outputs / Control input	Dual outputs for Alert/Fault monitoring (0 V / 24 V)‡: 1x Alert output 1x Fault output/standby input	
Compliance		
Certification	CE, UL (973IPS ONLY), RoHS	

To comply with UL 62368-1, the product must be mounted at a height ≤2m.

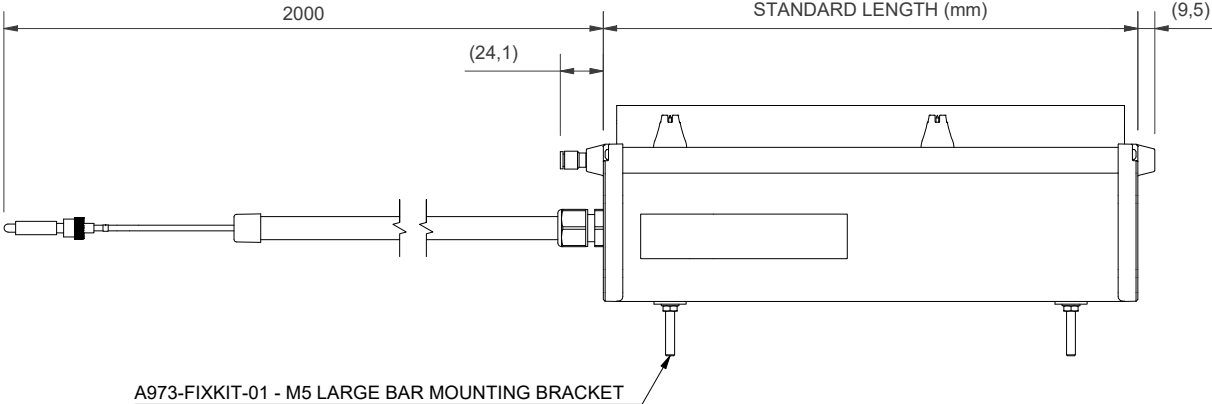
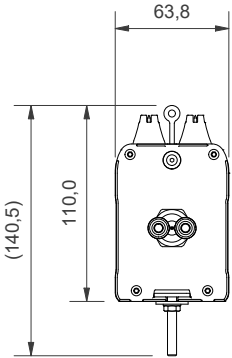
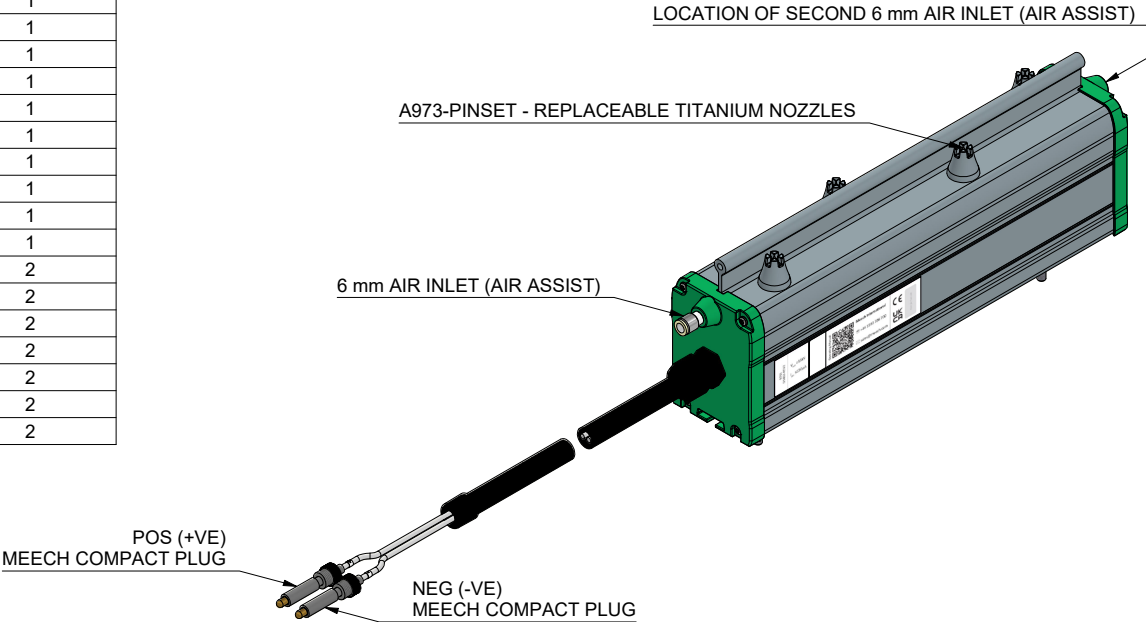
* Adjustable with PulseDrive, † Adjustable with BarMaster and SmartControl Touch, ‡ Adjustable with BarMaster

9. Technical drawings

Contact Meech customer services at customerservice@meech.com for additional technical drawings, providing the model code (see section 3).

Page	Product variant	Variant model code
24	Hyperion 973S Long Range Pulsed DC Bar	A973S-XXXX
25	Hyperion 973IPS Long Range Pulsed DC Bar	A973IPS-XXXX

973 STANDARD SIZES		
STANDARD LENGTH (mm)	NO. OF A973-FIXKIT-01 M5 LARGE BAR MOUNTING BRACKETS	NO. of AIR INLETS
300	2	1
450	2	1
600	3	1
750	3	1
900	3	1
1050	4	1
1200	4	1
1350	4	1
1500	4	1
1800	5	1
2100	5	2
2400	6	2
2700	7	2
3000	7	2
3300	8	2
3600	8	2
3900	9	2



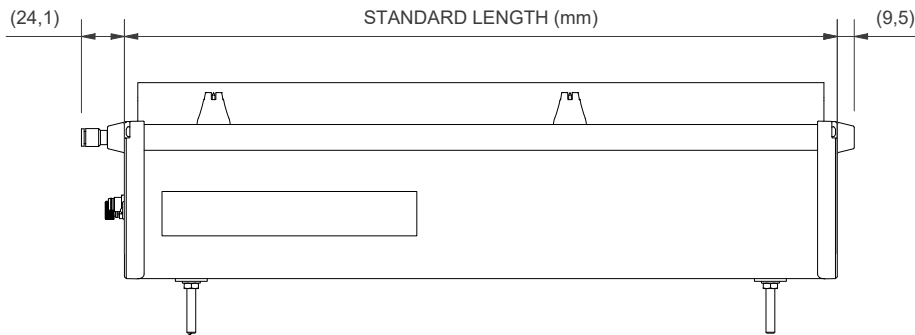
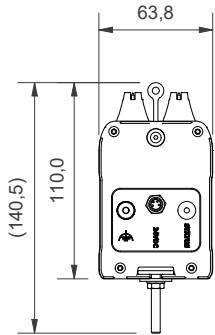
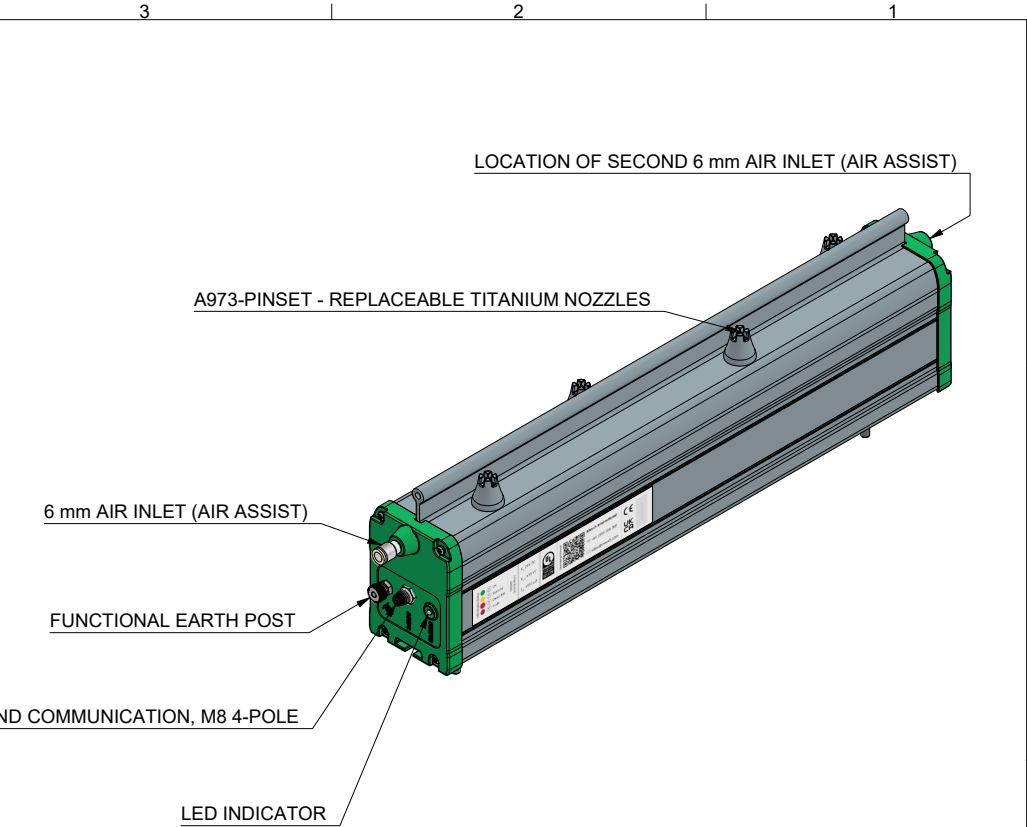
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web: www.meech.com

TITLE :	973 PULSED DC BAR - XXXX mm	TOLERANCE UNLESS OTHERWISE SPECIFIED
DRAWING NO:	A973S-XXXX	General $\pm 0.2\text{mm}$ Machined Work Metric $\pm 0.1\text{mm}$ Sheet Metal Fabrications $\pm 0.5\text{mm}$ Extrusion Work Metric $\pm 0.2\text{mm}$ Angular $\pm 0.30^\circ$
MATERIAL :	VARIOUS	DIMENSIONS IN MM DO NOT SCALE
FINISH :	VARIOUS	CRITICAL TO FUNCTION (CTF) DIMENSIONS AS MARKED

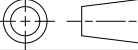
SHEET	SCALE
A3	NTS
PROJECTION	

DETAIL :	MARKETING	DATE :	13/08/2026	CHANGE NOTE:	MODEL REVISION NO:
DRAWN BY :	BC	SHEET :	1 / 1	N/A	1
CHECKED BY :		COPYRIGHT © MEECH STATIC ELIMINATORS LTD THIS DOCUMENT AND THE INFORMATION THEREIN IS THE PROPERTY OF MEECH INTERNATIONAL AND SHOULD NOT BE COPIED IN WHOLE OR USED FOR MANUFACTURE OR OTHERWISE DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF MEECH INTERNATIONAL.			
SIGNED OFF BY :					

973IPS STANDARD SIZES		
STANDARD LENGTH (mm)	NO. OF A973-FIXKIT-01 - M5 LARGE BAR MOUNTING BRACKETS	NO. OF AIR INLETS
400	2	1
600	3	1
800	3	1
1000	3	1
1200	4	1
1400	4	1
1600	4	1
1800	5	1
2000	5	2
2200	5	2
2400	6	2
2600	6	2
2800	7	2
3000	7	2
3200	7	2
3400	8	2
3600	8	2
3800	8	2
4000	9	2



A973-FIXKIT-01 - M5 LARGE BAR MOUNTING BRACKET

 'Meech International' is a trading style of Meech Static Eliminators Ltd	Meech International 2 Network Point Range Road, Witney OX29 0YN, UK Tel: +44 (0) 1993 706700 Fax: +44 (0) 1993 776977 email: sales@meech.com web: www.meech.com	TITLE : HYPERION 973IPS PULSED DC BAR - XXXX mm	TOLERANCE UNLESS OTHERWISE SPECIFIED General ± 0.2mm Machined Work Metric ± 0.1mm Sheet Metal Fabrications ± 0.5mm Extrusion Work Metric ± 0.2mm Angular ± 0°30'	SHEET A3	SCALE NTS	DETAIL : MARKETING	DATE : 13/08/2026	CHANGE NOTE: N/A	MODEL REVISION NO: 1
		DRAWING NO: A973IPS-XXXX				DRAWN BY : BC	SHEET : 1 / 1		DRAWING REVISION: A
		MATERIAL : VARIOUS	DIMENSIONS IN MM DO NOT SCALE			CHECKED BY : 	COPYRIGHT © MEECH STATIC ELIMINATORS LTD THIS DOCUMENT AND THE INFORMATION THEREIN IS THE PROPERTY OF MEECH INTERNATIONAL AND SHOULD NOT BE COPIED IN WHOLE OR USED FOR MANUFACTURE OR OTHERWISE DISCLOSED WITHOUT THE PRIOR WRITTEN CONSENT OF MEECH INTERNATIONAL.		
		FINISH : VARIOUS	CRITICAL TO FUNCTION (CTF) DIMENSIONS AS MARKED			SIGNED OFF BY : 			

10. Maintenance

The product should be cleaned regularly based on its operational environment, with a cloth moistened with a small amount of IPA or methylated spirits. Doing so will restore the ion reference percentage, extend the product lifespan and ensure optimal performance.

The product must not be washed down. Should the product become wet, ensure it is thoroughly dried before restoring power to it.

11. CE approval

A CE Declaration of Conformity for the 973S & 973IPS exists and can be provided on request.



12. UL approval

The 973IPS is compliant with UL Listing requirements.

A copy of the UL certification can be found at www.meech.com/download/ul-certificates/



13. Health & safety

Emission of Ozone

Considerably lower than the international standard of 0.1 ppm.

Output current

The maximum output current is less than 5 mA to prevent serious harm to the operator, nevertheless any contact with the output post should be avoided where possible.

Usage restrictions

This equipment is not suitable for use in locations where children are likely to be present.

14. Repairs & warranty

This product is warrantied by Meech International Ltd. to the original purchaser against defects in material and workmanship for 2 years after shipment.

For support, contact your local Meech representative. Alternatively, more details can be found at:

<https://meech.com>

support@meech.com

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