

# iONstream FUSION 4.0

6 kV / 12 kV / 18 kV **AUTO<sup>PC</sup>**® Technology



INTUITIVE  
Visualisation

PROCESS  
Analytics

Industry  
4.0

INTELLIGENT  
Network

INTERACTIVE  
Communication

SMART  
Product

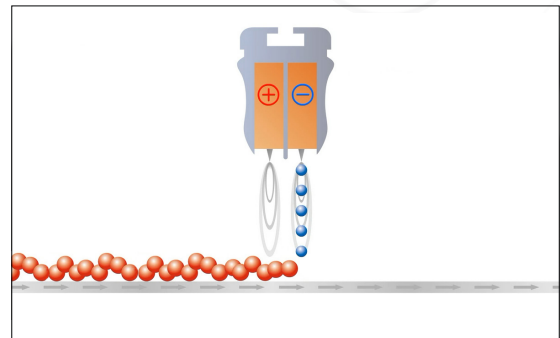
DATA  
Logging

# Intelligent electrostatic neutralising system

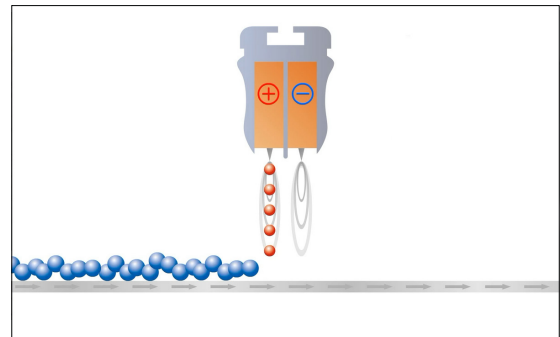
## Product Highlights

**iONstream FUSION 4.0** is a high performance **AUTO<sup>DC</sup>** static neutralising system. It incorporates the latest 24V DC technological developments and is micro-controller operated with local embedded intelligence. Electrode contamination and emitter pin status, as well as neutralising efficiency, are continuously monitored and visualised. Each neutralising bar is accessible via App or customer connectivity via Gateway.

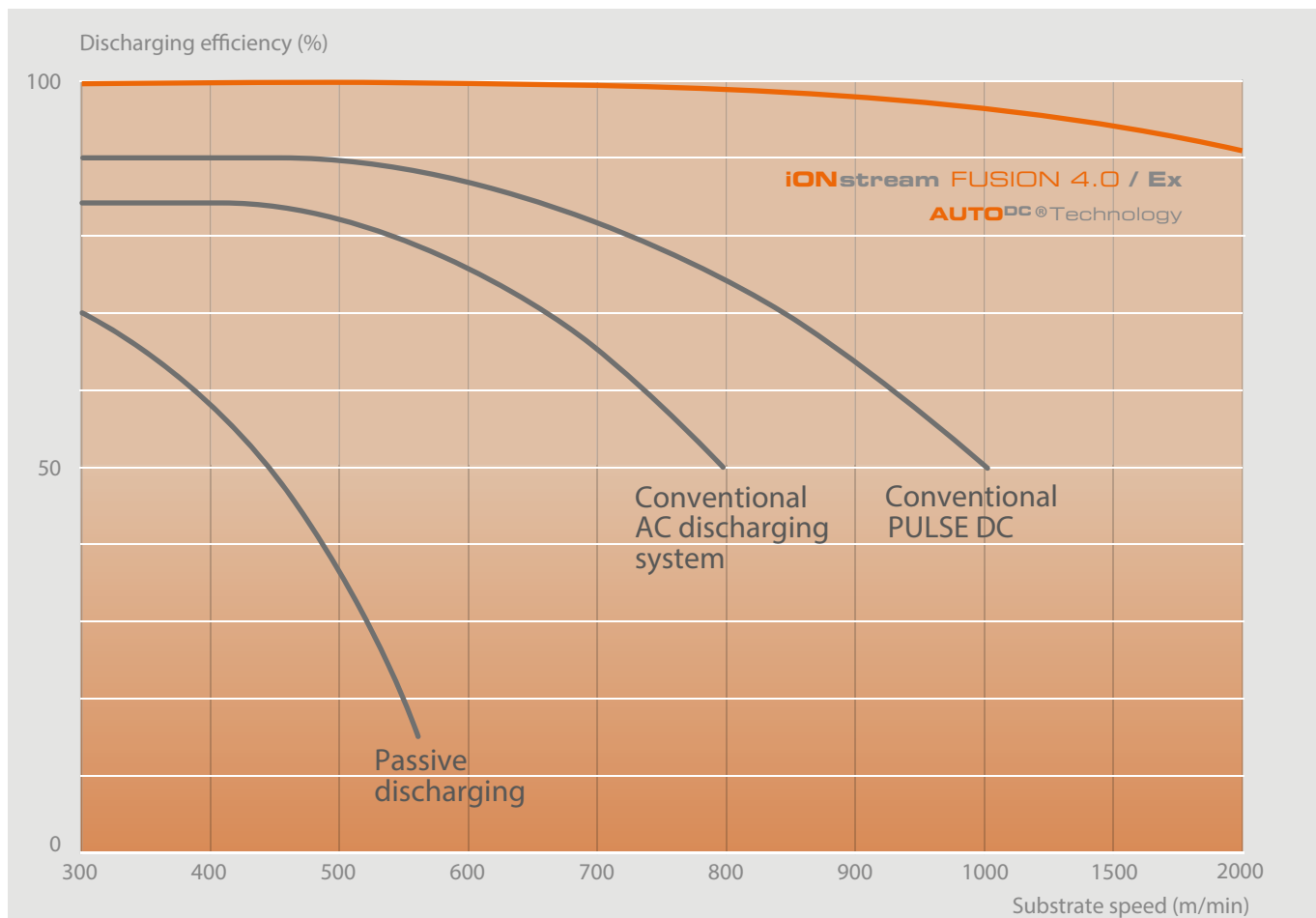
The specially developed **AUTO<sup>DC</sup>** technology senses the polarity of the charge on the target substrates surface and automatically corrects the pulse/pause relationship towards the dominant polarity surface charge in order to achieve maximum neutralising effect. All electronic and high voltage components are encapsulated within the bar profile. The System is available in three versions (6, 12, 18 kV) for normal, long and very long neutralising range and very high web speed.



Substrate charge **positiv** = **negative** ions are emitted



Substrate charge **negativ** = **positive** ions are emitted

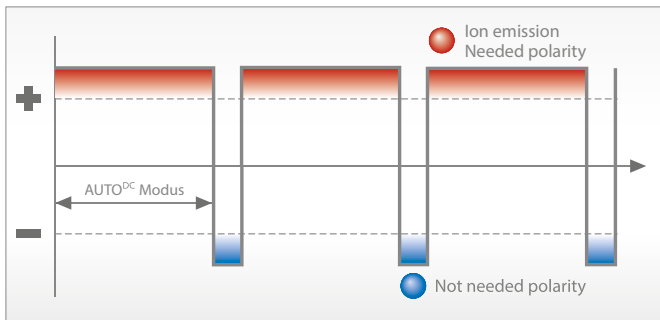


System discharging efficiency comparison (dynamically)

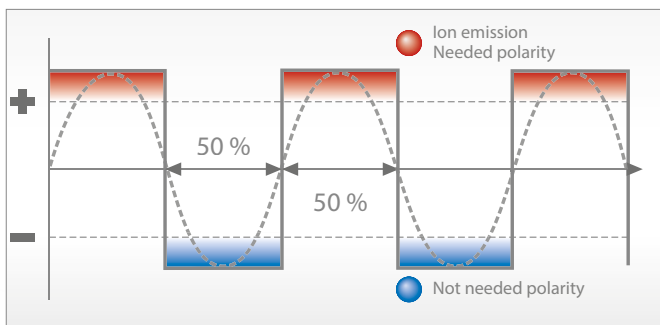
## Auto<sup>DC</sup>® Technology

By applying alternate positive and negative high voltage current to the emitter pins, ions of both polarities are generated. **IONstream FUSION 4.0**'s special **AUTO<sup>DC</sup>®** technology generates substantially more ions due to its perfect control of the pulse/pause relationship and therefore provides a much more homogenous electrostatic field when compared to any other conventional AC - and PULSE<sup>DC</sup> method neutralising systems. The tip material itself consists of a special tungsten alloy, which allows conical wear of the tips and prolongs the service life many times over at almost full efficiency.

Our revolutionary design of the static neutralising bar is constructed with a special glass fibre re-enforced extrusion incorporating non-metallic shields which work in harmony with the electrostatic field of the emitter pins.



*AUTO<sup>DC</sup>® Technology*



*Conventional PULSE<sup>DC</sup> or AC Technology*

The result of this revolutionary technology and intelligence is an effective neutralising range of up to 1500 mm in certain applications. The expert DOE software, in combination with its real time micro-controller functionality, allows easy integration into today's industrial fieldbus as well as Ethernet networks. Our experienced specialists can assess your machine and advise on how to effectively install the **IONstream FUSION 4.0** into your production process to 'eliminate' your static issues.

## **IONstream FUSION 4.0** System advantages

### Application:

- AutoDC<sup>®</sup> Technology
- 24V DC supply, all electronic components integrated in neutralising bar profile
- Extremely high remote real power
- Network compatible through CANbus
- Plug & Play
- Data visualisation via App
- Data transfer via Bluetooth, WLAN, OPC and any field bus
- Ex Electrode and field strength meter integrated in the same network

### Safety:

- Shock proof according EN norm
- ATEX certification for zone 1  II 2G IIB T6

### Economical:

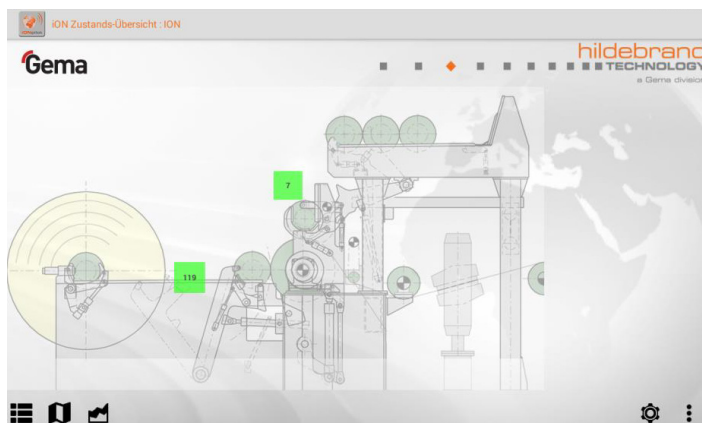
- 100% process control with log book of system parameters
- TQM Sensor option to detect and protocol residual charge

# Monitoring & Communication

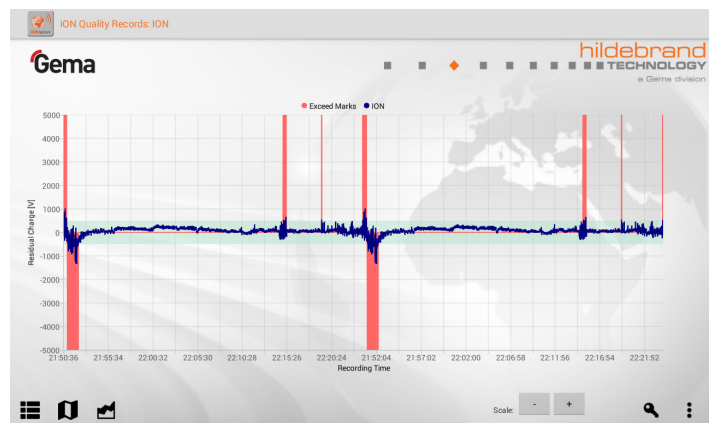
## Access via **iON**pilot APP

Access via **iON**pilot App für Smart Devices, Tablet or OPC - Solution.

- Customized real time visualisation of all network users position and status.
- Overview of the network participants with «one touch» status display.
- Recording and logging of residual charge data with **iON**sense FUSION.

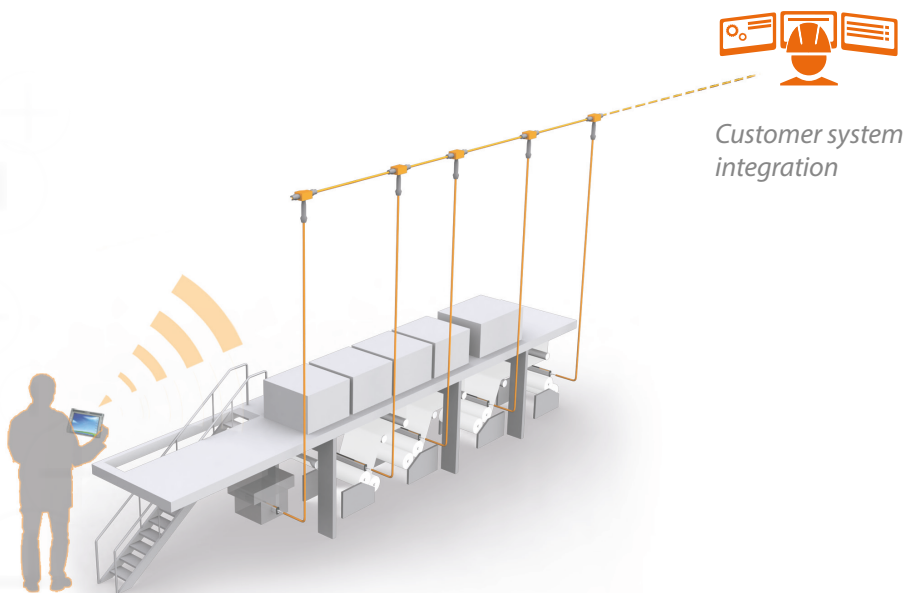


Overview of the network participants



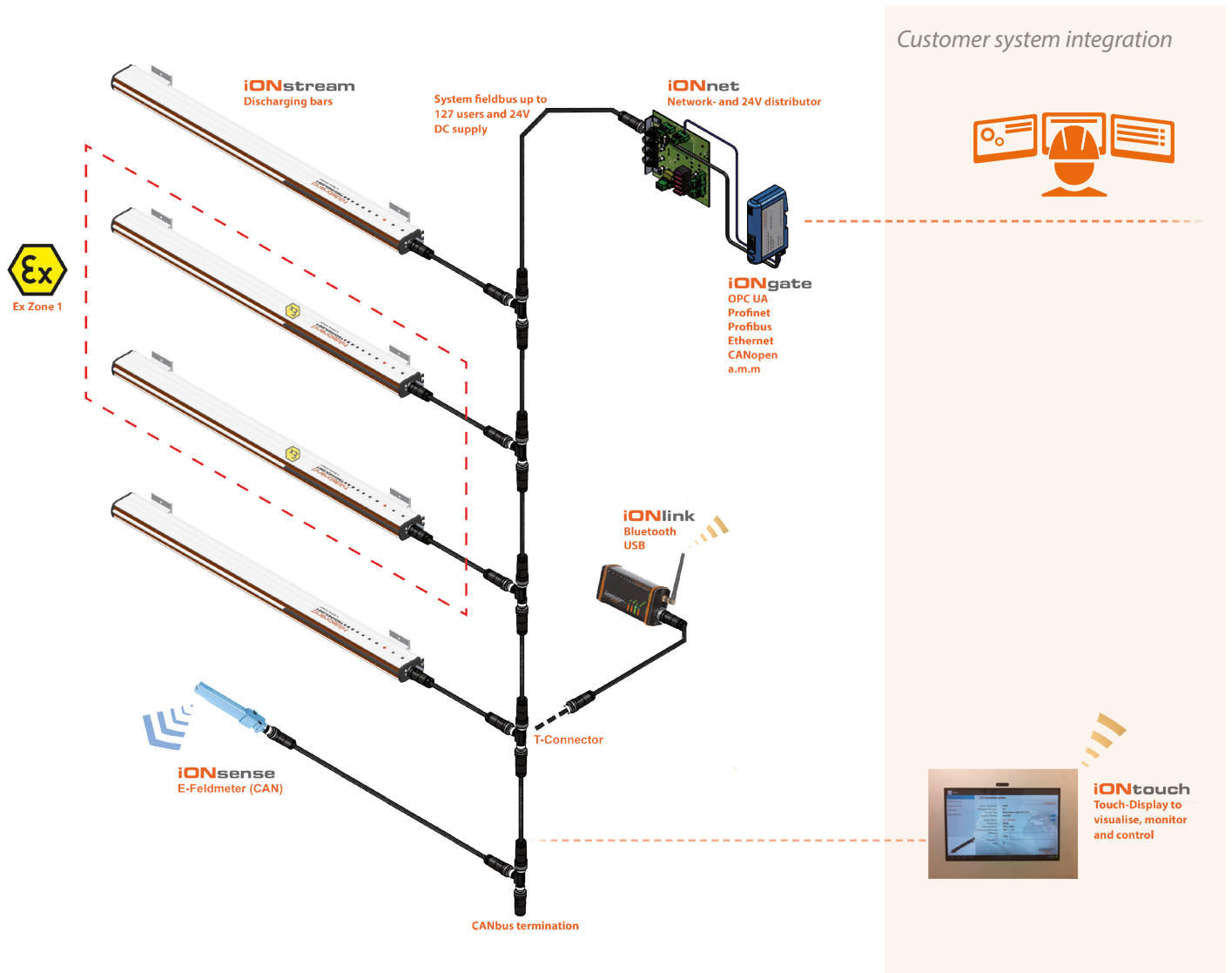
Recording and logging

## Connection via Interface to customer control centers

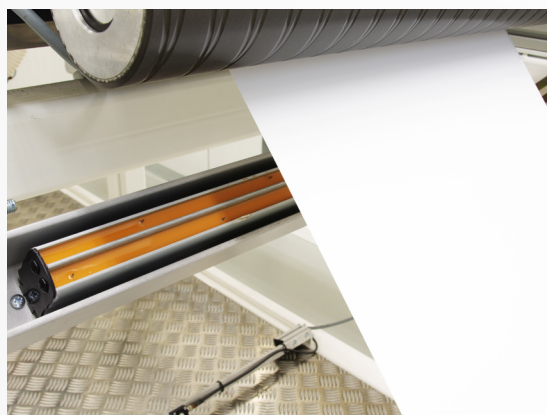


## Network Capability

**iONstream FUSION 4.0** can be quickly and easily integrated into a process control system over an industrial network. Our **iONgate** interface seamlessly adapts to all common fieldbus systems with plug-and-play functionality.







Agent in Singapore: **INNOSPECTRA (ASIA) Pte Ltd**

20 Sin Ming Lane  
#05-56, Midview City  
Singapore 573956  
Tel: +65 6262 6556  
Fax: +65 6262 6573  
Website: [www.innospectra.com](http://www.innospectra.com)

**Gema**

Gema Switzerland GmbH  
Mövenstrasse 17  
CH-9015 St.Gallen



**hildebrand**  
**TECHNOLOGY**  
a Gema division

Fon +41 71 313 83 00  
Fax +41 71 313 83 83

[info@hildebrand-technology.com](mailto:info@hildebrand-technology.com)  
[www.hildebrand-technology.com](http://www.hildebrand-technology.com)

Surface Dust Removal • Electrostatic Neutralising • Electrostatic Charging • Measurement Systems

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