



# SENSIRION

THE SENSOR COMPANY

CMOSens<sup>®</sup>  
TECHNOLOGY

# Sensirion – The Sensor Company

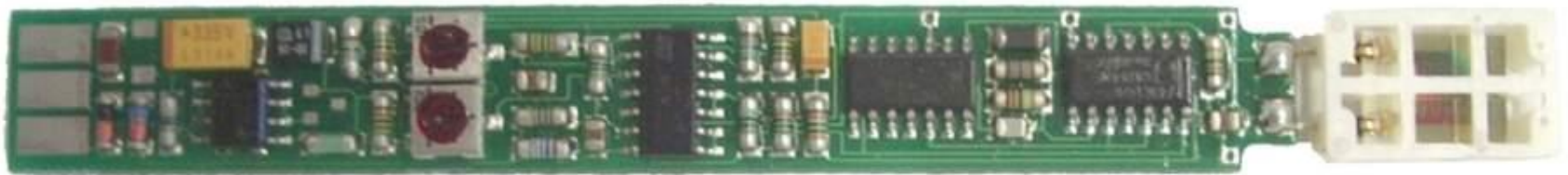
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Daniel Längle  
Key Account Manager  
Liquid Flow Products

22.05.2015  
MEDD Utrecht

# CMOSens Technology

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Temperature and Humidity sensor before Sensirion

CMOSens®



# A Success Story

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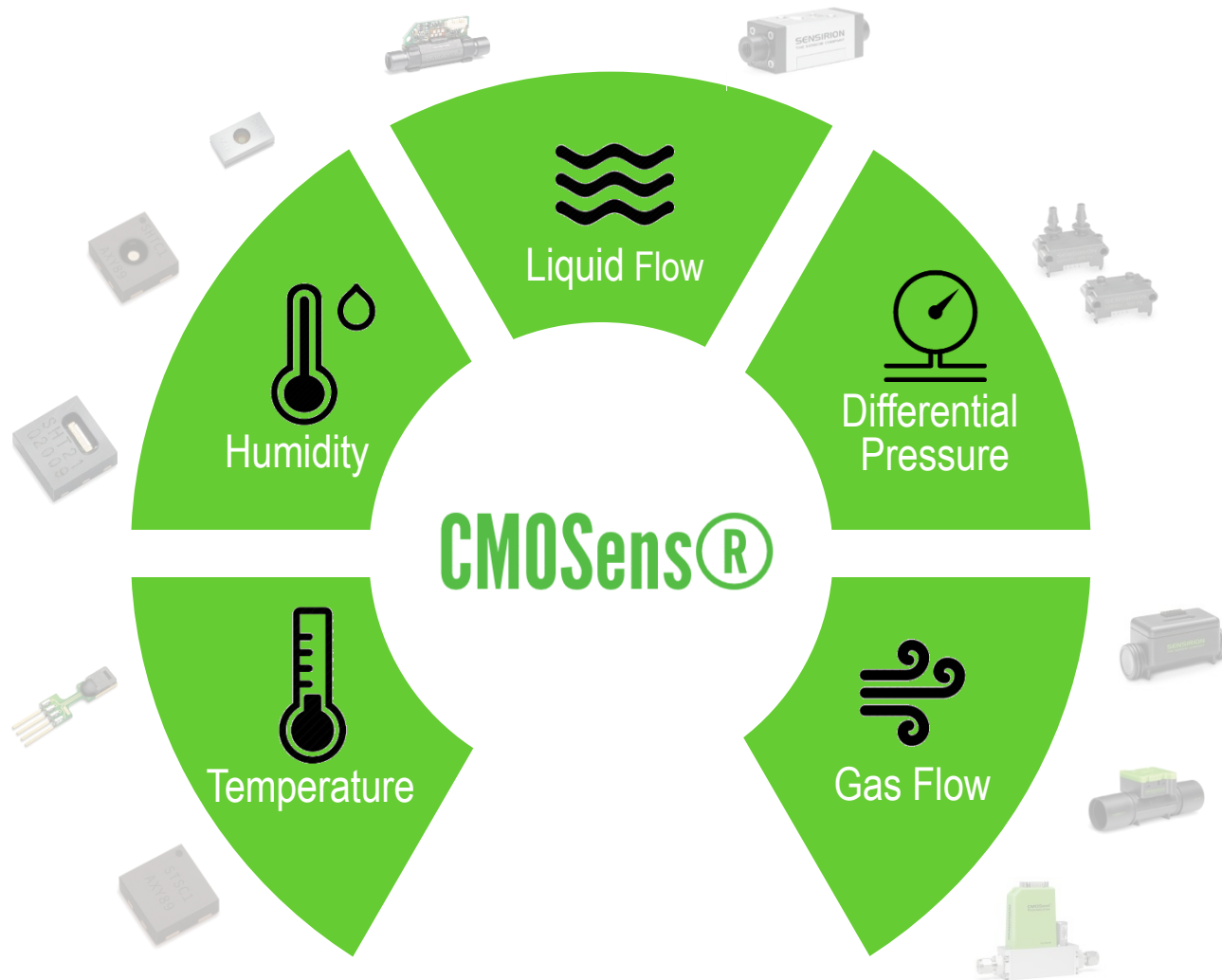
## Sensirion inside:

- 2 of 5 cars produced worldwide
- First humidity sensor in a Smartphone
- Strong footprint in medical devices (Ventilation, Anesthesia)



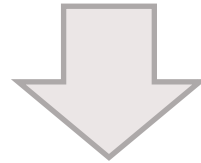
# Sensirion Product Range

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# The Vision

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Medical Applications

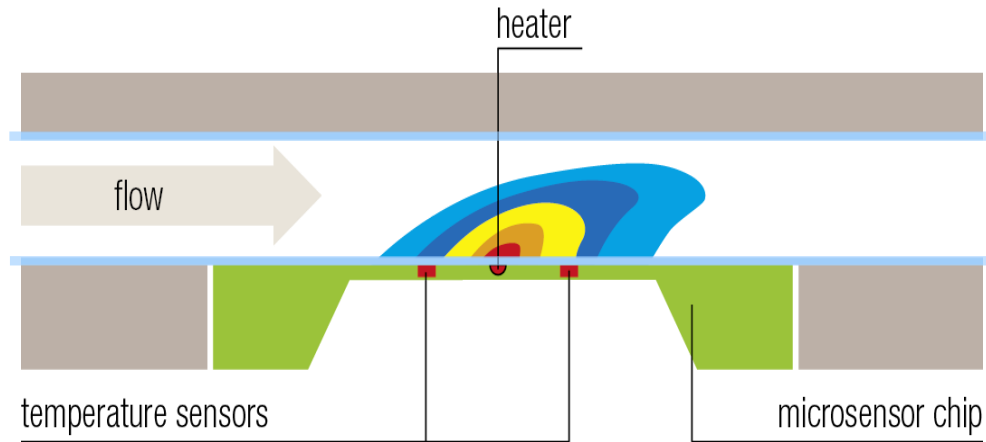
# Successful sensor

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- **Small**
- **Cost-effective**
- **High-performance**

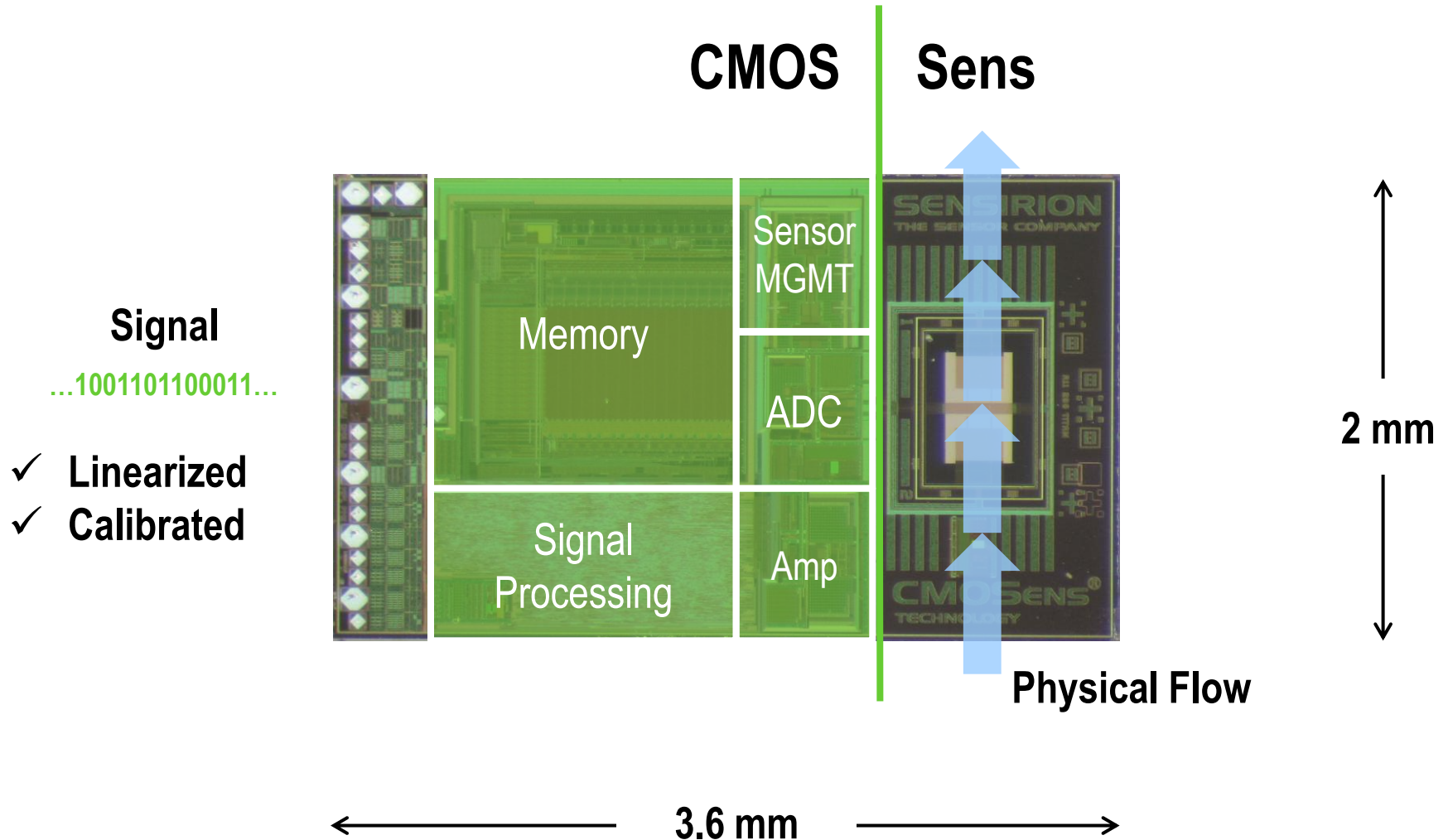
# Measurement: Microthermal Principle

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- Media isolation
- No moving parts
- Open, straight flow channel
- High performance at low flow rates





# Powerful Advantages

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## CMOSens®

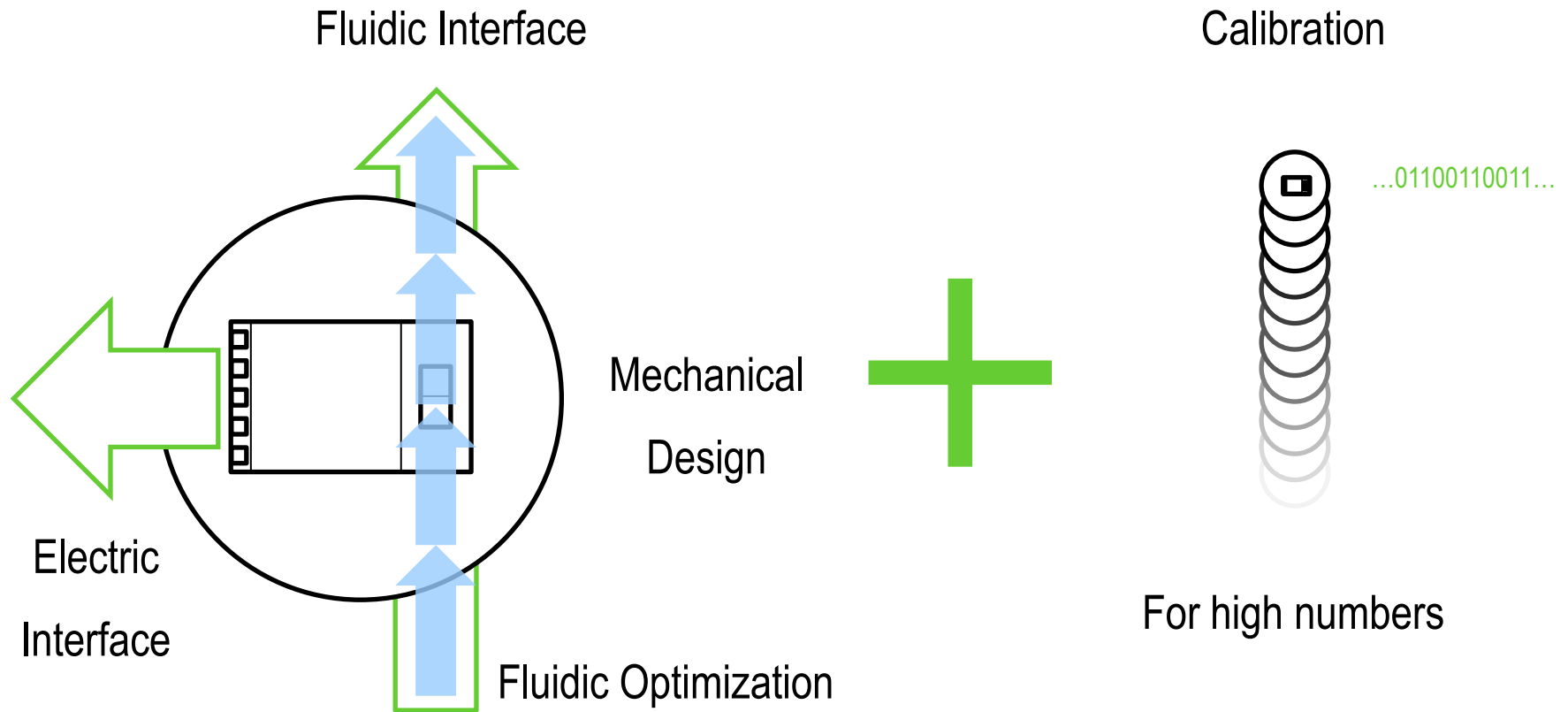
- Small
- Cost-effective
- Reliable

## Thermal principle

- High performance at low flow rates

# Sensirion Expertise

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# Design Study Medical – Disposable Liquid Flow Sensor

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- Plastic shell
- Flow channel inside
- Easy integration: Luer lock fittings

# Infusion Therapies - Monitoring

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Free  
Flow

Air in  
Line

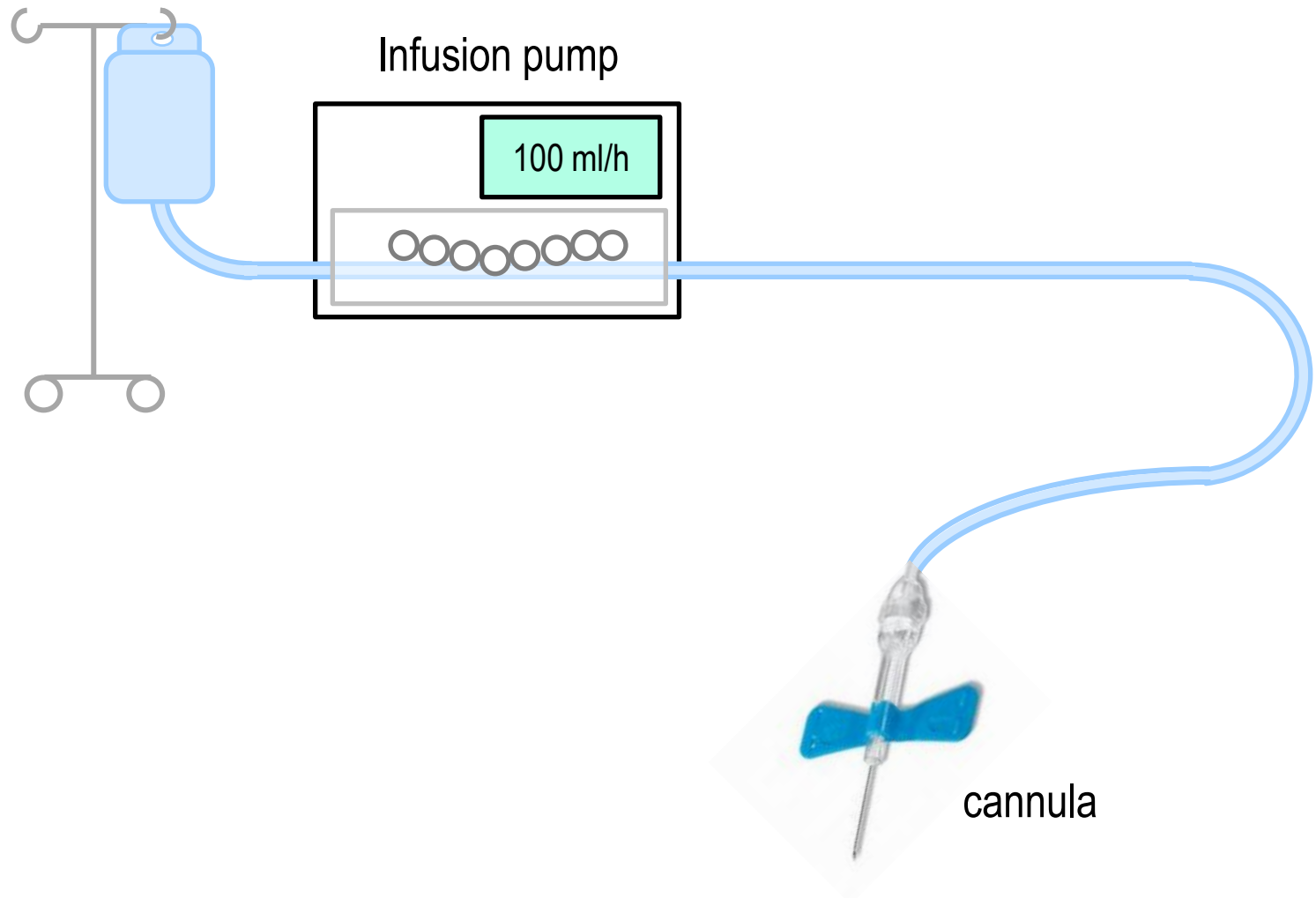
Occlusion

Open  
Line

Multi  
Infusion

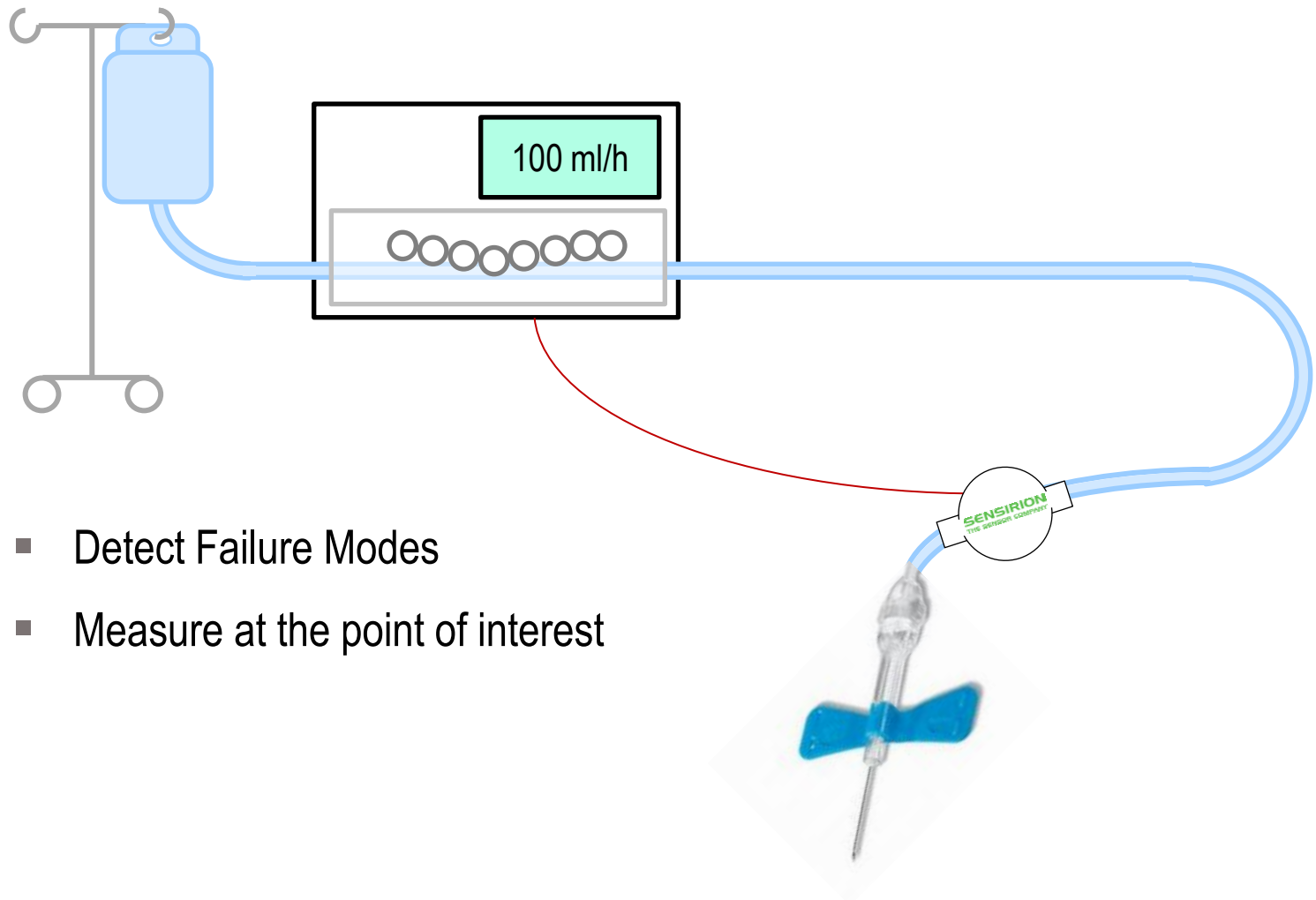
# Infusion pump with sensor

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# Infusion pump with sensor

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- Detect Failure Modes
- Measure at the point of interest

# Infusion pump with sensor

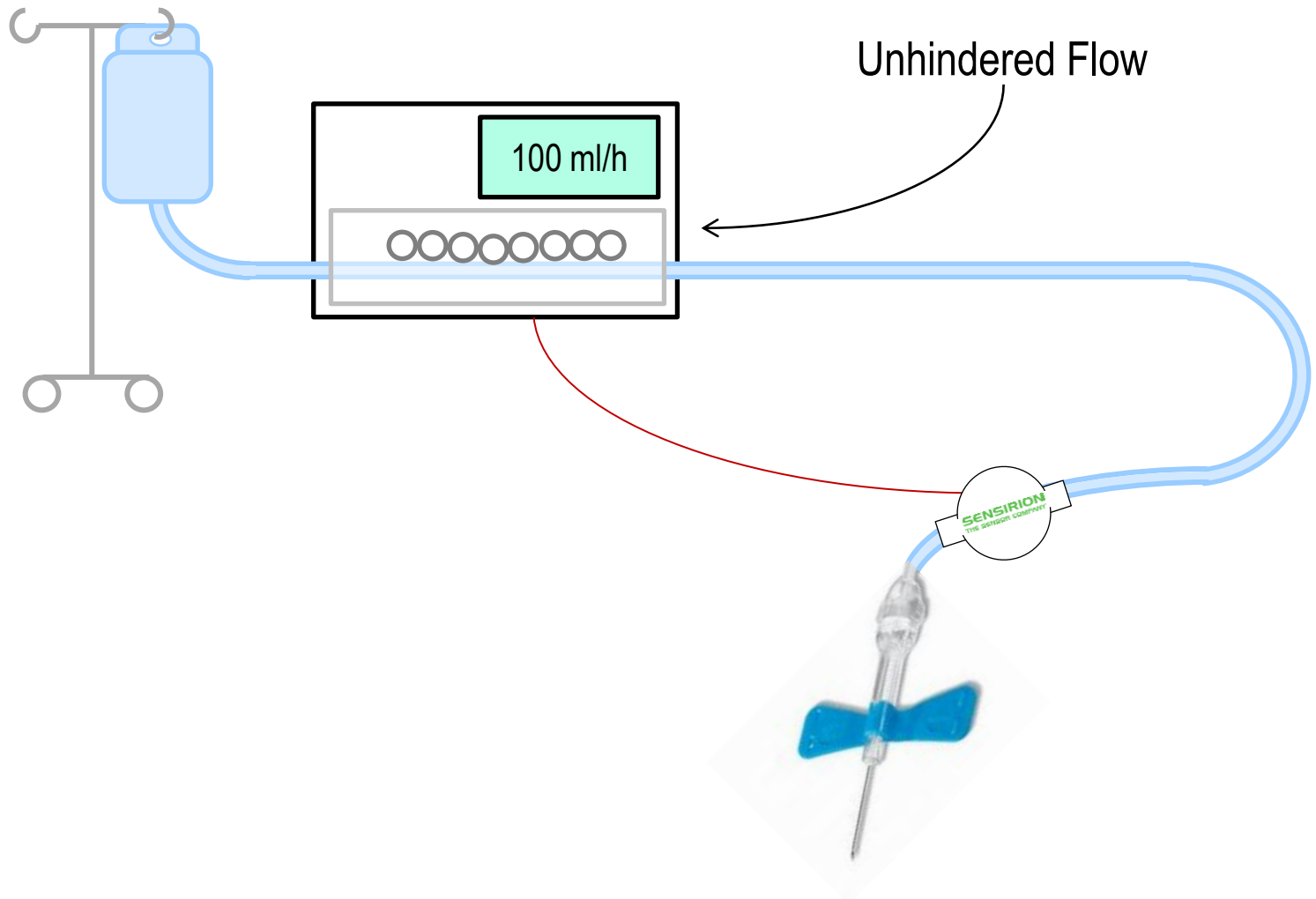
Free Flow

Air in Line

Occlusion

Open Line

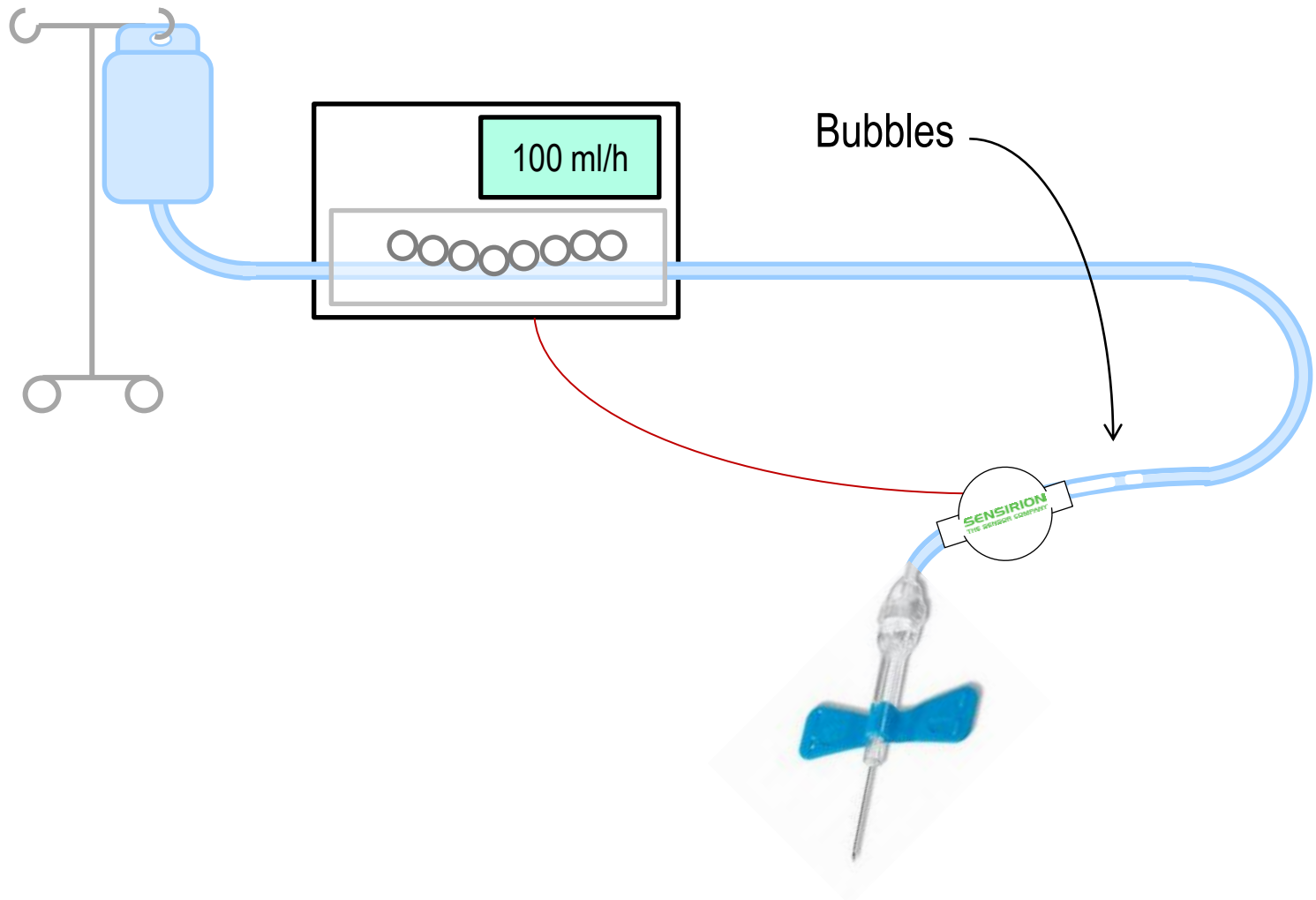
Multi Infusion





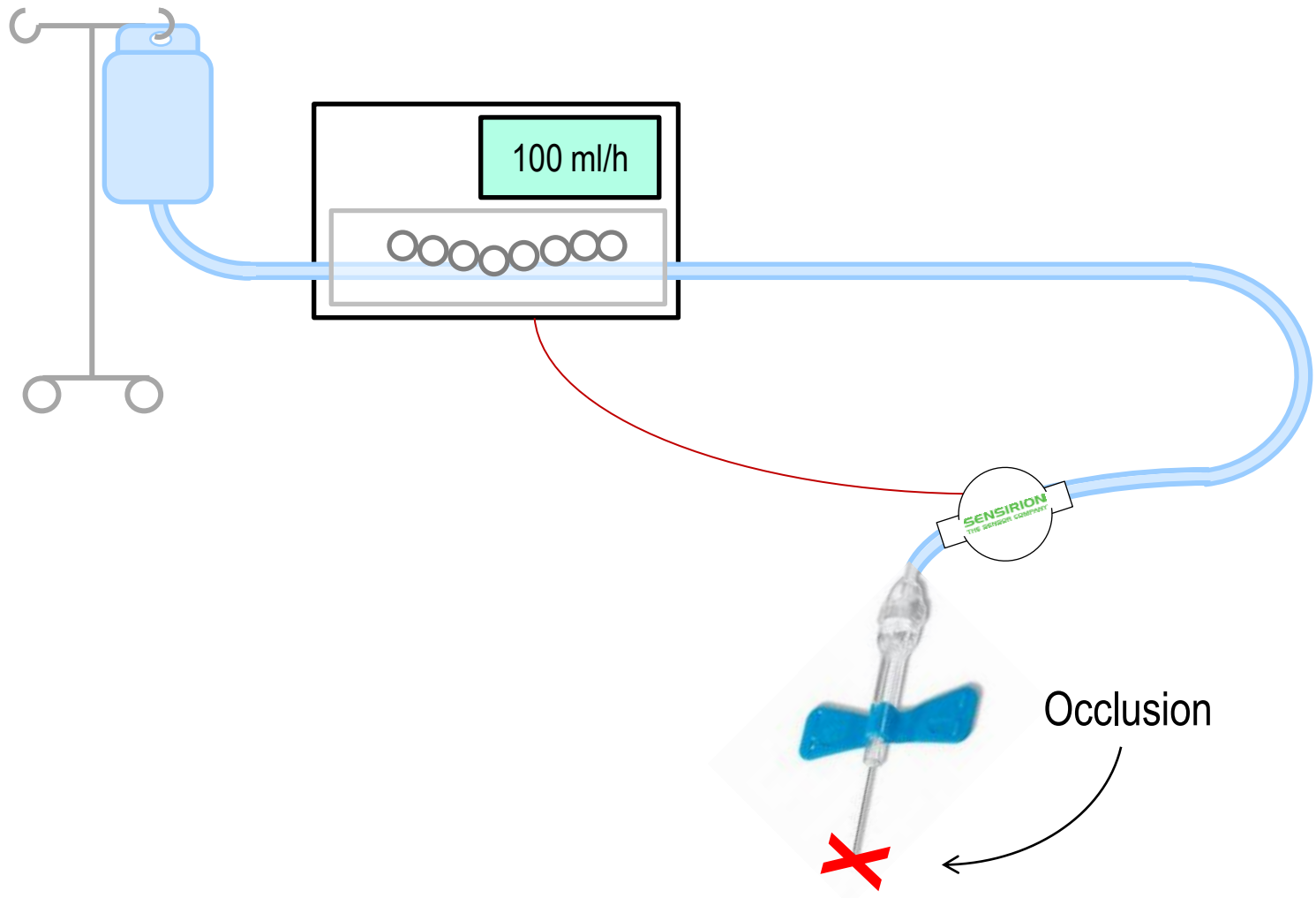
# Infusion pump with sensor

- Free Flow
- Air in Line
- Occlusion
- Open Line
- Multi Infusion



# Infusion pump with sensor

- Free Flow
- Air in Line
- Occlusion
- Open Line
- Multi Infusion



# Infusion pump with sensor

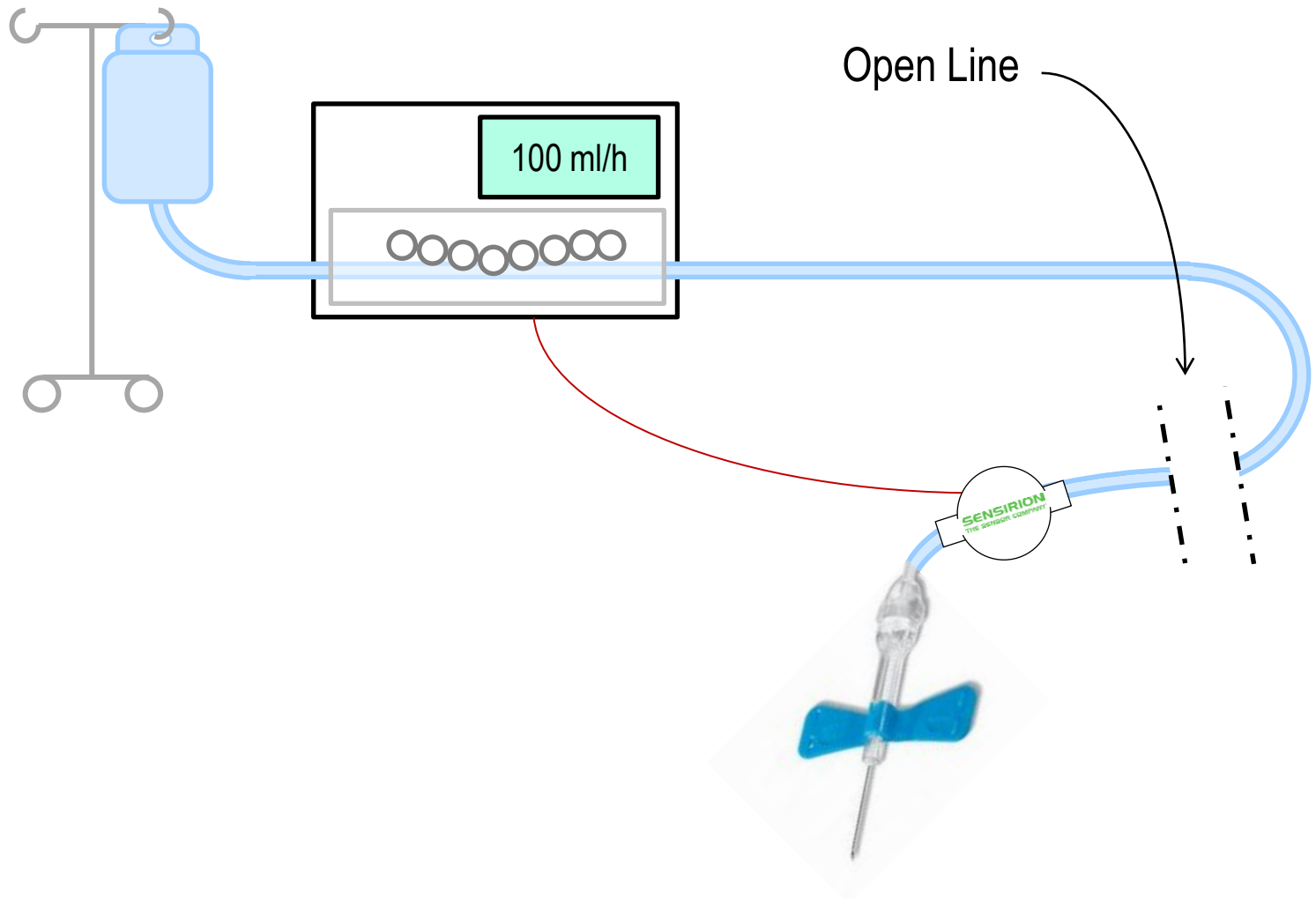
Free Flow

Air in Line

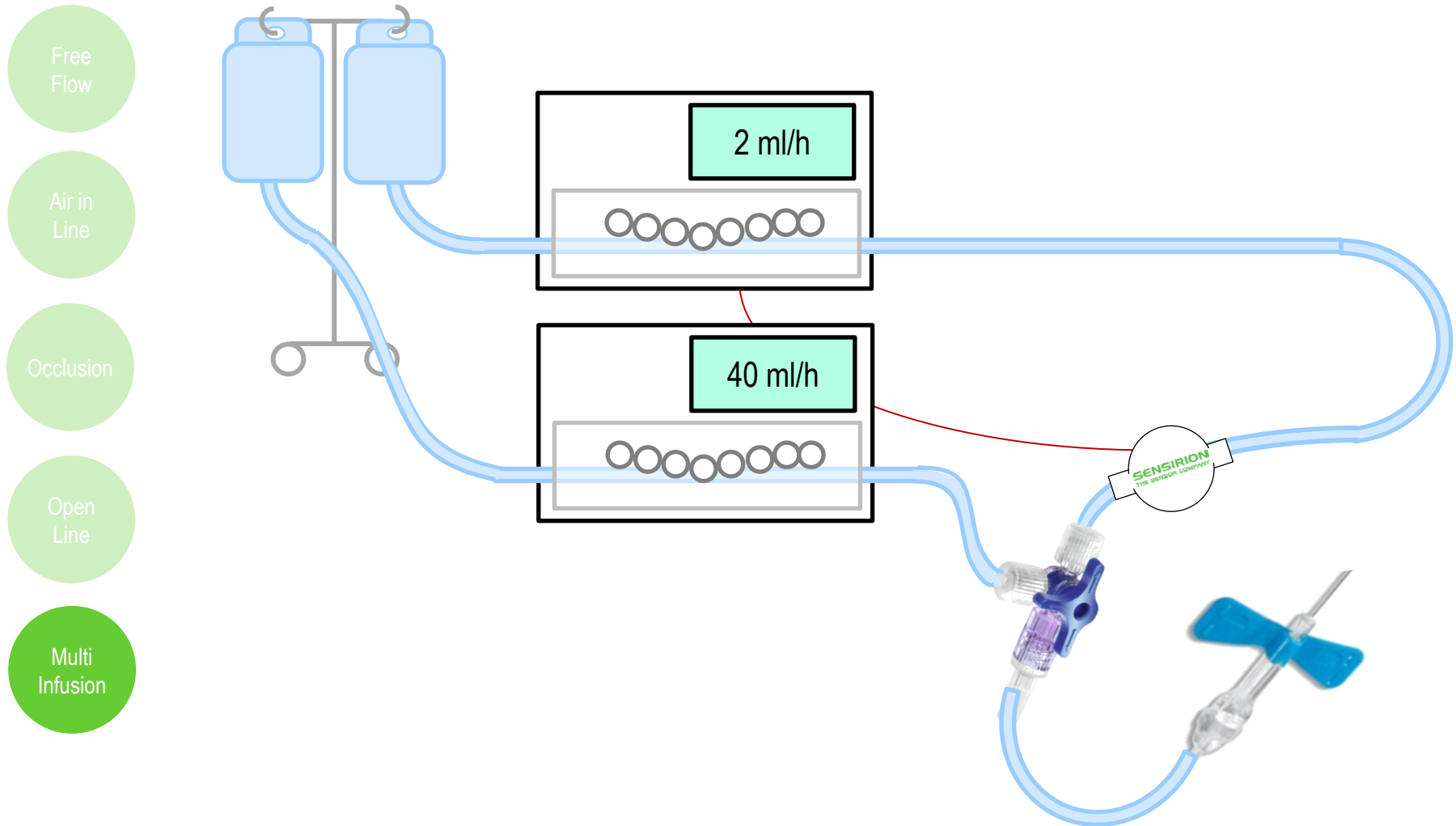
Occlusion

Open Line

Multi Infusion



# Infusion pump with sensor



# Thank you for your attention!

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