

# Intelligent power supplies

Reliable power supply directly in the field



Product presentation

# Intelligent power supplies



## 24 volts, wherever you want!

If electric voltage were to compete in a running discipline at the Olympics, it would certainly participate rather in the 100 than the 5,000 metres. Its power loss issues over long distances are no secret after all. This is why it makes perfect sense, especially in the low voltage power class, to keep the copper stretch from the starting block to the finish as short as possible. For 24 volt power supplies, this means: get out of the control cabinet, and into the field. supply is a local thing.

This makes distances short and offers several advantages at once: less voltage loss, less wiring complexity, more flexibility. At the same time, our units for field use have other talents such as individually configurable output currents and electronic circuit breakers. And thanks to the IO-Link interface, you can conveniently keep an eye on the power supply performance from the control centre and intervene if necessary.

Sounds good? Our power supplies are already in the blocks. You give the start signal. For example, at [ifm.com/gb/dn42](http://ifm.com/gb/dn42)



## Product advantages

# Intelligent power supply directly in the field



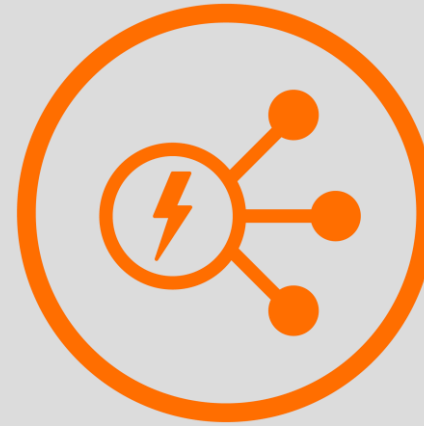
### Made for field use

Thanks to protection class IP 65 / IP 67, no control cabinet is required.



### Reliable voltage supply

Short cable runs between power supply and consumer prevent voltage losses.



### Configurable output channels

Current can be set separately for each output.



### Permanent circuit protection

Integrated electronic circuit breakers protect against excessive current and short circuit.



## Application overview

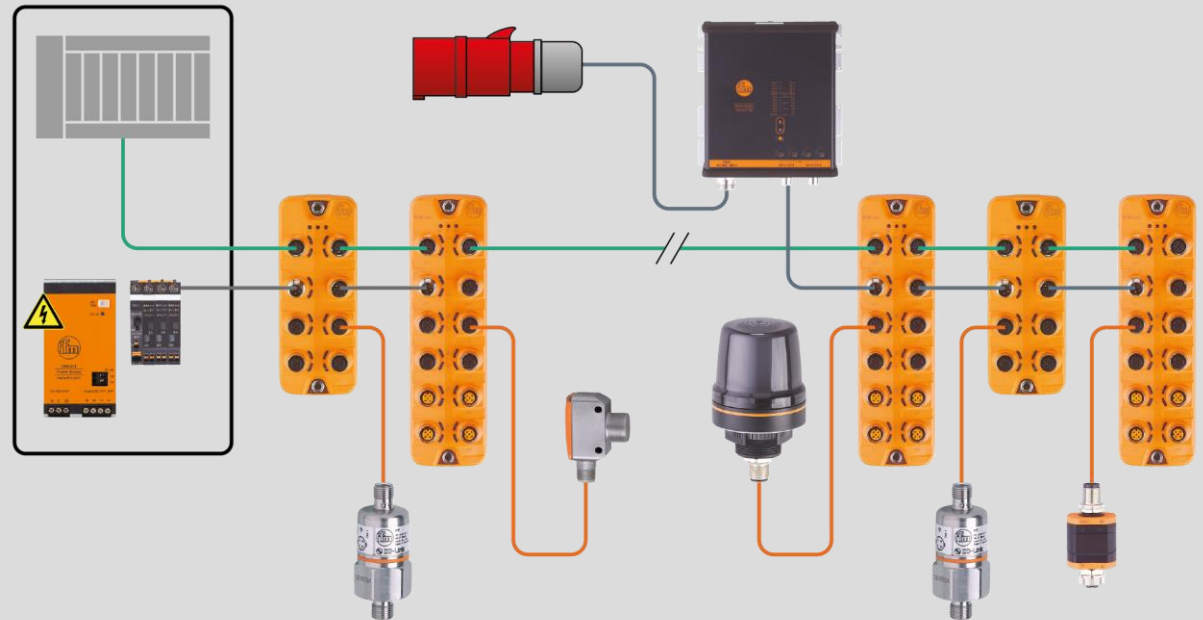
# Intelligent power supplies in the field

### Challenge

- **Long cables in decentralised systems often lead to**
  - voltage drops and power loss
  - unreliable disconnection of the circuit breaker in case of excessive current and short circuits

### Solution / benefits

- **Decentralised 24V distribution directly in the field. Benefits:**
  - long distances are bridges with higher voltage
  - energy is converted and distributed by the power supply for field use in the proximity of the consumer
  - No need for decentralised control cabinets, reduced wiring complexity



## Application overview

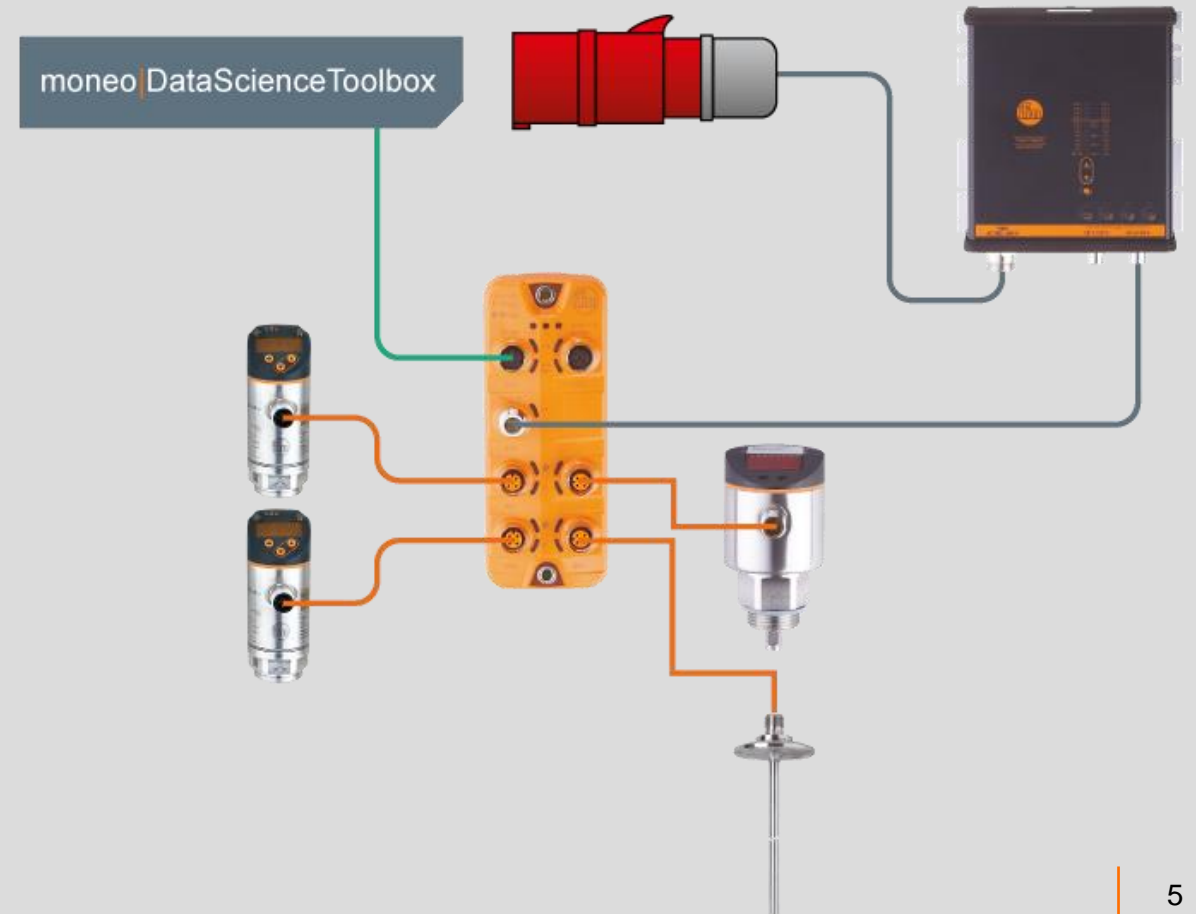
# IloT solutions (decentralised acquisition of measured values)

### Challenge

- Retrofitted IloT applications in existing plants require extended energy infrastructure
- Existing system infrastructure should not be changed, increased subsequent wiring complexity

### Solution / benefits

- **Measured values can be acquired via IO-Link master or io-key and transferred to the IloT infrastructure**
  - Power supplies for field use do not require a control cabinet
  - Reduced wiring complexity for the power supply of the retrofitted measuring systems



Good to know

# Intelligent power supply without control cabinet



## Energy efficiency

Reduced power loss because extra-low voltage is only generated where it is needed.



## Cost savings

Installation is possible directly in the field without control cabinet, minimised wiring complexity due to standardised connections.



## Intelligent circuit breakers

Electronic circuit breakers provide reliable protection in case of excessive current and short circuit.



## Versions with IO-Link interface

Simplified setting and extensive diagnostic options.



# Intelligent power supplies

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