

# ifm electronic

## Industri 4.0

Hans Eliasson  
Jonas Lindegårde



A photograph of two industrial workers in a factory setting. A man in the background wears a yellow high-visibility vest over a dark shirt and a white hard hat. He is looking at a tablet device. In the foreground, a woman wearing a white hard hat and a blue and yellow high-visibility jacket is pointing at a large touchscreen monitor with her right hand. The monitor displays various data and graphs. The background is blurred, showing industrial equipment and lights.

ifm group

World market leader in sensor technology and pioneer in Industry 4.0

Grundat 1969 (1972 i Sverige)

+ 7,300 anställda Worldwide

Forsking och utveckling: + 1,100

37 anställda i Sverige

Försäljning i mer än 95 länder

Över 174,000 köpande kunder worldwide

Omsättning: 1 miljard € (2019)



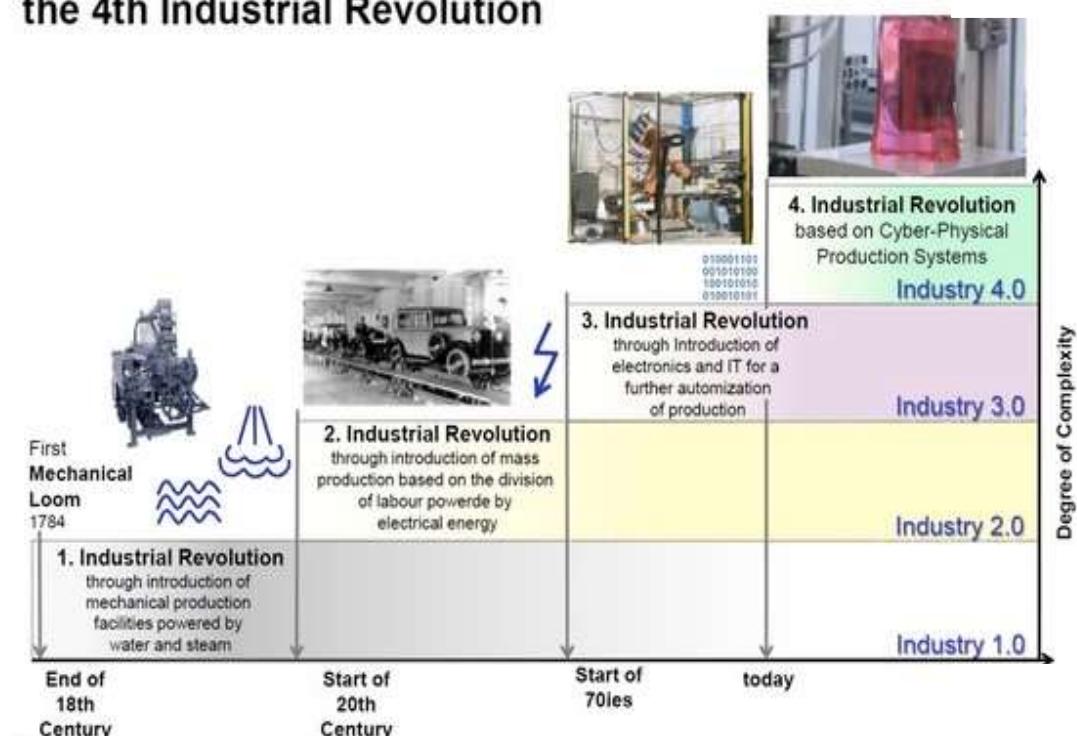
ifm electronic  
Solutions for the IIoT world

# ifm electronic

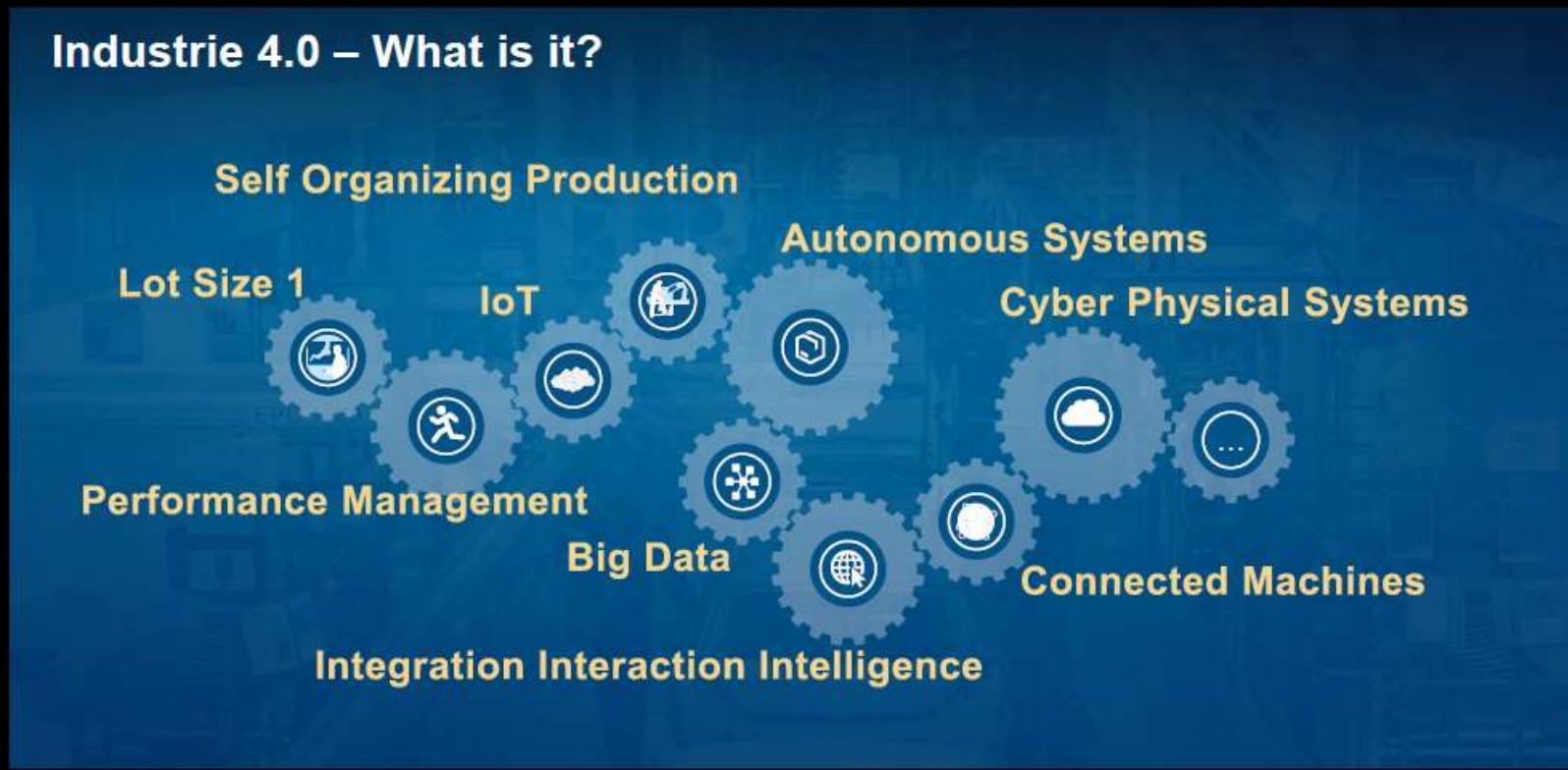


ifm electronic  
Solutions for the IIoT world

## From Industry 1.0 to Industry 4.0: Towards the 4th Industrial Revolution



## Industrie 4.0 – What is it?



Source : SAP



ifm electronic  
Solutions for the IIoT world

## Context of Industrie 4.0 along the Value Chain

Transparency, Flexibility, Individualization and Integration are key principles



Source : SAP



ifm electronic  
Solutions for the IIoT world



Our senses

Våra givare



**ifm electronic**  
Solutions for the IIoT world

# ifm electronic

## Industri 4.0 börjar med digitala givare



Låser upp det smarta i din givare.

IEC 61131-9



# ifm electronic

## Industri 4.0

Rätt information

Rätt tid

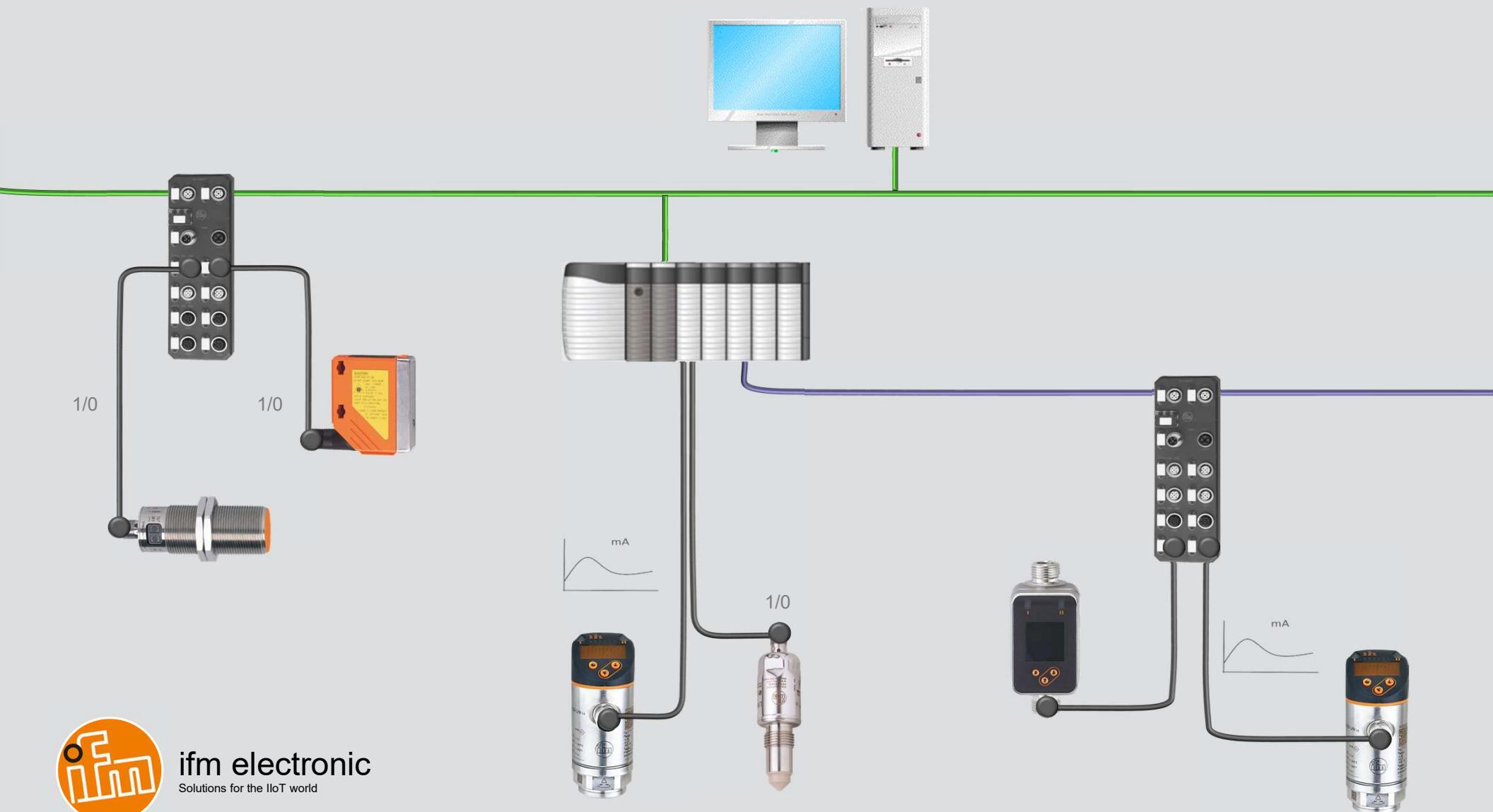
Rätt mottagare



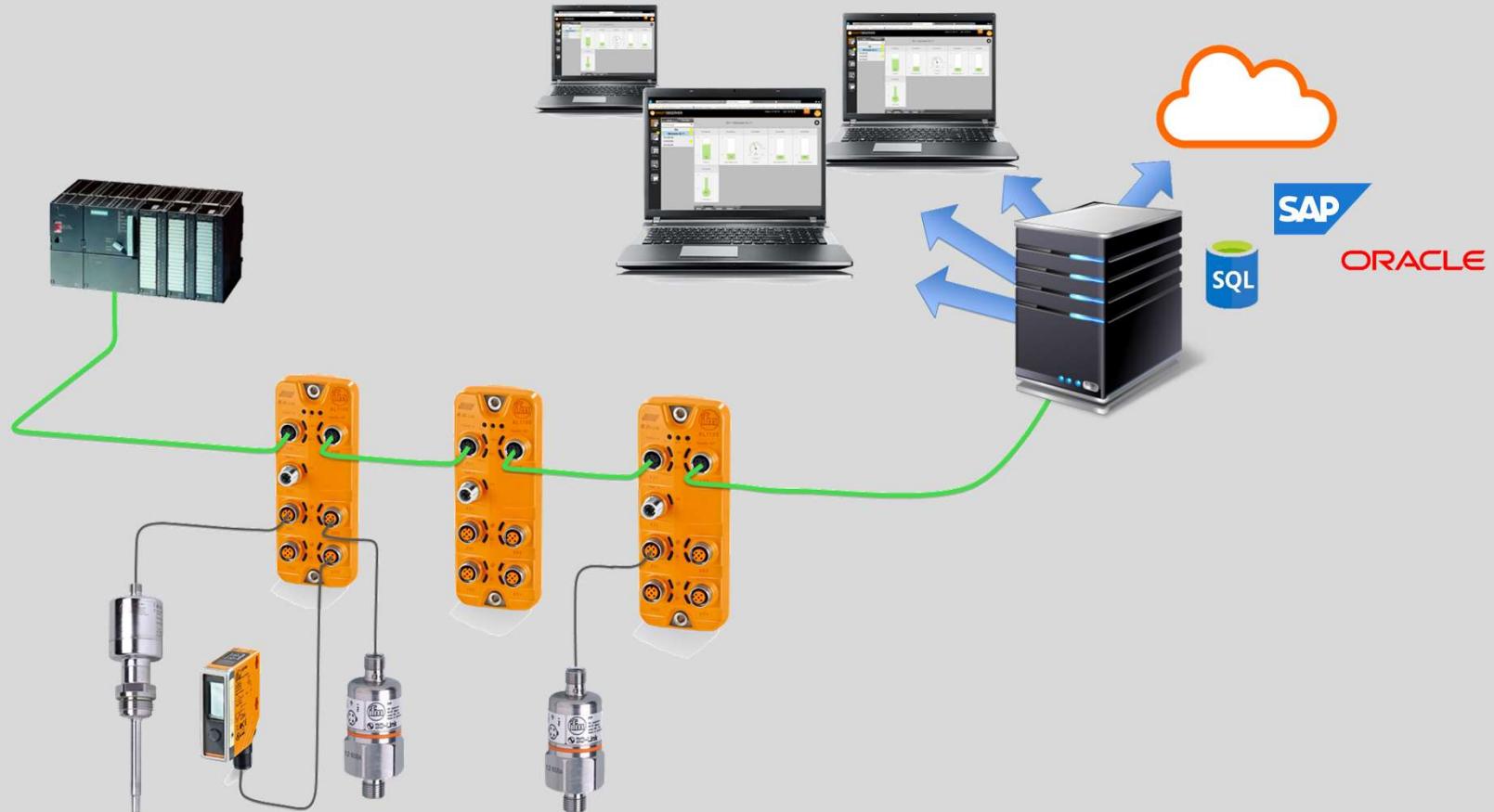
SOURCE : SAP



ifm electronic  
Solutions for the IIoT world



**ifm electronic**  
Solutions for the IIoT world



**ifm electronic**  
Solutions for the IoT world

Nuvarande flöde  
m<sup>3</sup>/h

Kopplingspunkt 1

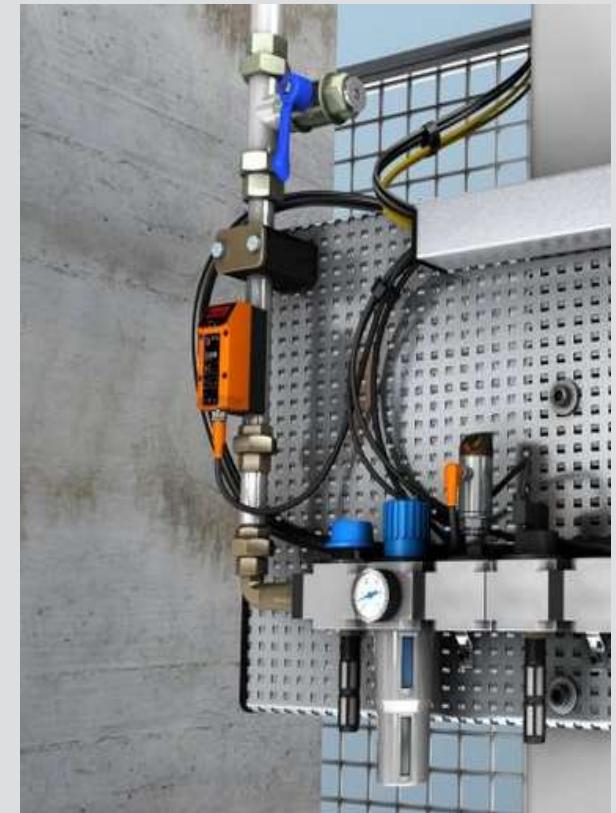
Kopplingspunkt 2

Temperatur  
°C

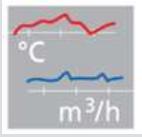
Totalt  
m<sup>3</sup>/h



+ 50 parameter, t.ex. produkttagg, max / min temperatur, max / min flöde.



**ifm electronic**  
Solutions for the IoT world



Flertalet mätvärden från en givare  
t.ex. flöde och temperatur



Diagnostik från alla Devices



IO-Link finns ofta i standardgivare



Automatiskt utbyte av devices



Digitala mätvärden



**ifm electronic**

Solutions for the IIoT world

Parameter som t.ex. max / min temperatur, max / min flöde, timmar, starter osv hjälper  
er med att ställa diagnos på era applikationer

Parameter	Index	Subindex	Typ	Factory setting
Device Access Locks	12		RecordT (16 Bit)	false
Vendor name	16		StringT (19 Byte)	ifm electronic gmbh
Vendor text	17		StringT (11 Byte)	www.ifm.com
Product Name	18		StringT (6 Byte)	SD5600
Product ID	19		StringT (6 Byte)	SD5600
Product Text	20		StringT (20 Byte)	Compressed air meter
Serial Number	21		StringT (12 Byte)	
Hardware Version	22		StringT (2 Byte)	
Firmware Version	23		StringT (5 Byte)	
Application Specific Tag	24		StringT (32 Byte)	***
Function Tag	25		StringT (32 Byte)	***
Location Tag	26		StringT (32 Byte)	***
Device Status	36		UIntegerT (8 Bit)	0 (Device is OK)
Detailed Device Status	37		OctetStringT (3 byte) [11]	0x00,0x00,0x00
Process data input	40		RecordT (128 Bit)	
Process data output	41		RecordT (8 Bit)	
P-n	500		UIntegerT (8 Bit)	0 (PnP)
dAP.F	510		UIntegerT (16 Bit)	6
SEL1	520		UIntegerT (8 Bit)	1 (FLOW)
SEL2	521		UIntegerT (8 Bit)	1 (FLOW)
FOU1	531		UIntegerT (8 Bit)	4 (OFF)
FOU2	532		UIntegerT (8 Bit)	4 (OFF)
Active Events	545		RecordT (32 Bit)	
Param configuration fault	546		UIntegerT (32 Bit) [10]	0 (OK)
Loc	550		UIntegerT (8 Bit)	1 (uLoc)
uni.F	551		UIntegerT (8 Bit)	0 (m³/h)
cFL.F	555		IntegerT (16 Bit)	56
cFH.F	556		IntegerT (16 Bit)	14994



**ifm electronic**  
Solutions for the IoT world