

Smart Observer

Versatile online monitoring

ifm Smart Observer Webinar

Wednesday 05 August















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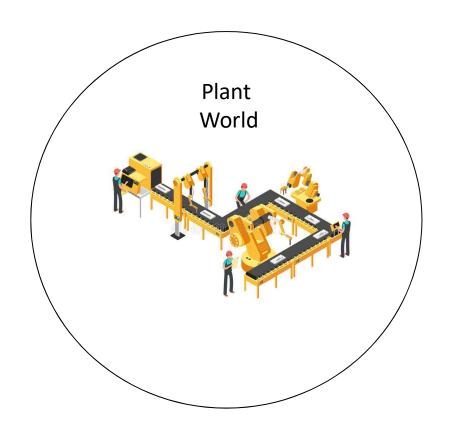
Overview – Smart Observer Versatile Online Monitoring

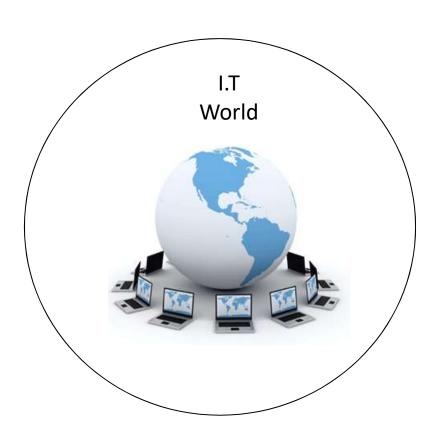
- Shop Floor / Top Floor
- Purpose of reporting data
- Challenges in todays reporting of data
- Smart Observer software
- LR Agent Versatile interfacing
- Architecture
- Applications and Benefits
- Q&A





Shop Floor / Top Floor









Shop Floor / Top Floor



Data Reporting



Instructions Targets



- Automation
- Manufacturing / Production
- Plants
- Machines

- I.T Technology
- Reporting
- Decisions
- Planning





Purpose of Reporting Data

Get the right info..

At the right time..

To the right person..

- KPI (Key Performance Indicators)
- Material Planning (Stock in and Stock out)
- OEE (Overall Equipment Effectiveness)
- · Optimization and Increase Uptime
- Preventive Maintenance Decisions
- Reduction of Manufacturing Costs
- Monitor Utilities and Energy Consumption
- ..



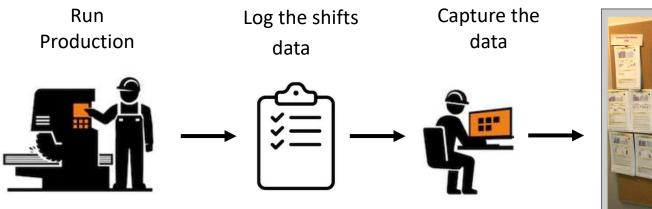




Challenges in todays reporting of data

- Time it takes to receive the data
- Accuracy of the data

Present the data









Challenges in todays reporting of data

What prevents new technology from being adopted quickly easily?

3 C's





Challenges in todays reporting of data

What prevents new technology from being adopted quickly easily?



Cost

- Budget Constraints
- Limited Time and Resources



Change

- Resistance to Change
- Customization and Flexibility



Complexity

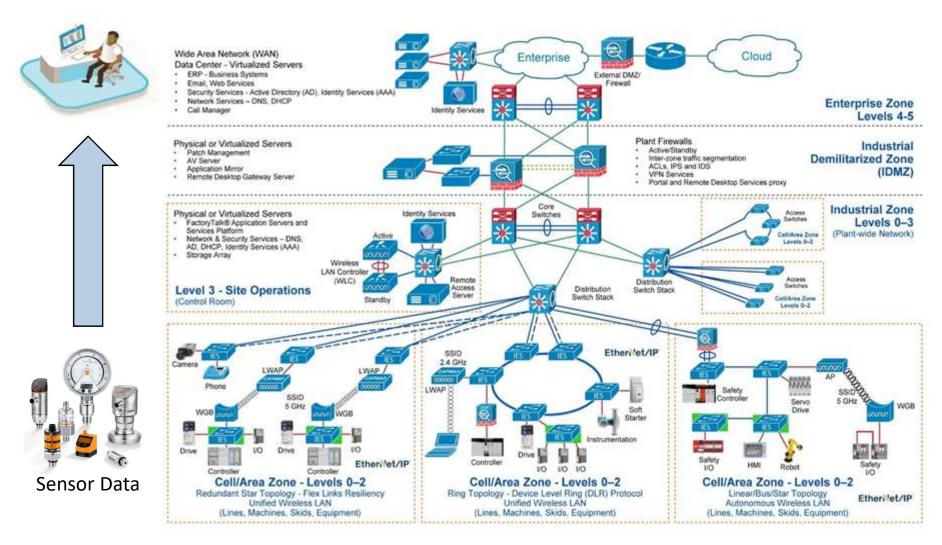
- Existing Systems
- Starting Point

What if we introduce technologies that didn't have these barriers?





Complexity







Smart Observer





Versatile Online Monitoring





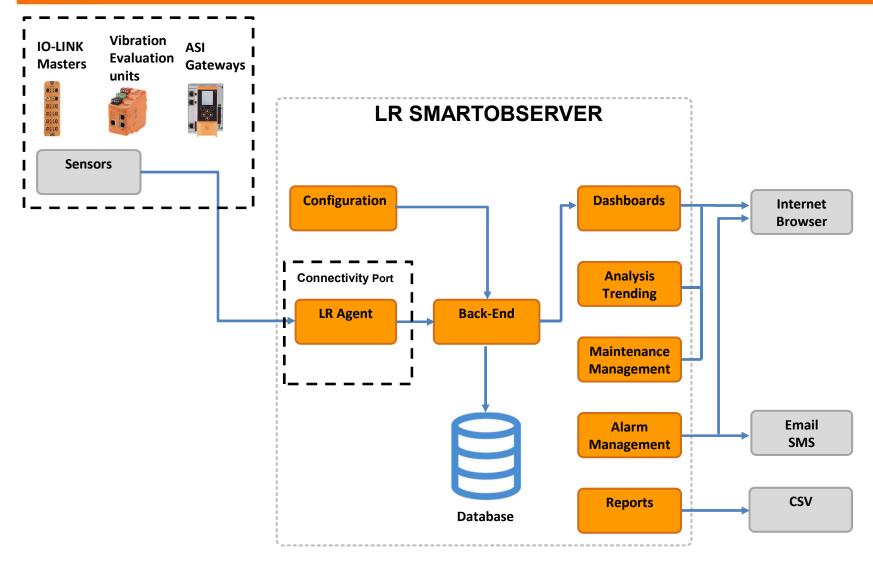
Smart Observer – Core Functions



Store Sensor Data



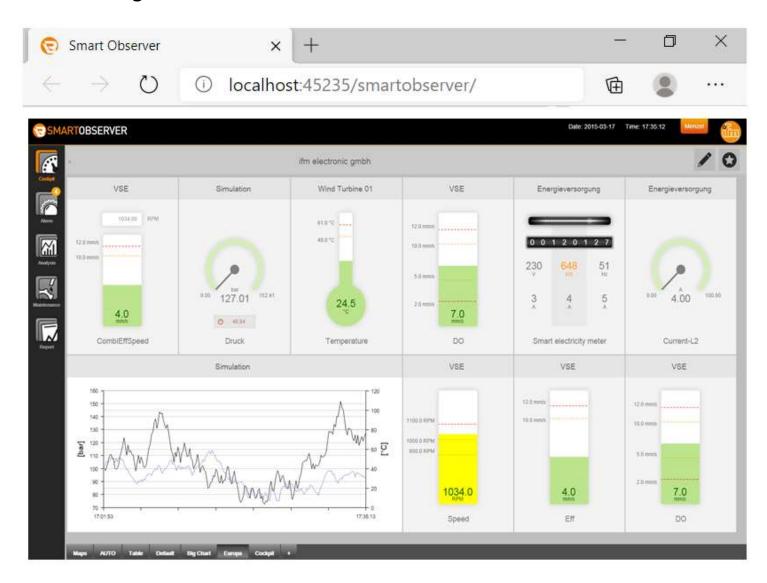








Dashboard Viewing



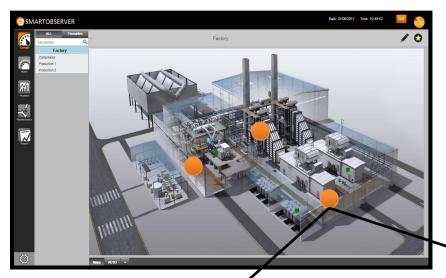




Dashboard Viewing

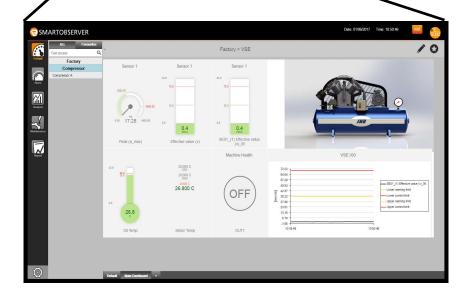
Navigation

- Overview of global locations
- Drill down to plant level
 And then to machine level



Dashboarding and Cockpits

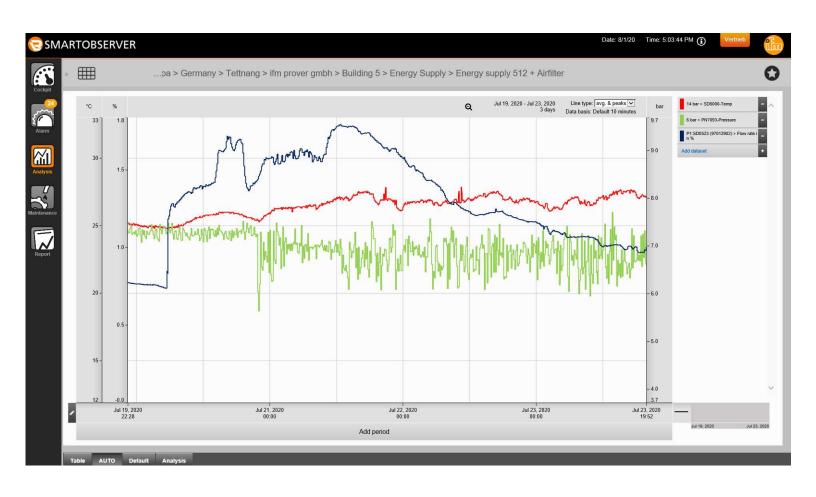
- Overview of current systems
- Choose layout
- Fully customizable to your specifications







Analysis Trending



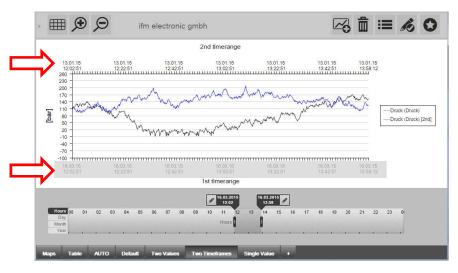




Analysis Trending

- Easy to use filter tools
- Choose the Values to trend
- Easy zoom in chart by mouse drag and zoom out
- Choose the time period
- More than one timeline in a chart

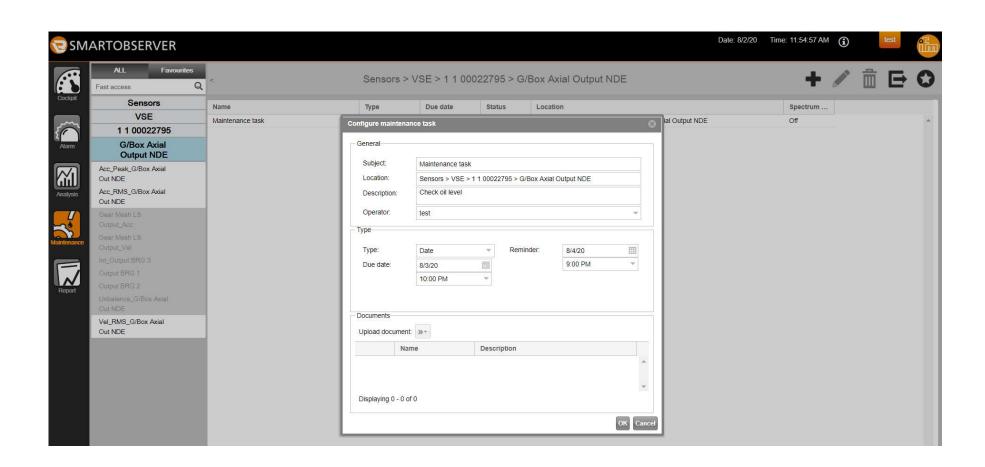








Maintenance Management







Maintenance Management

- Create maintenance tasks
- List of all planned tasks
- Maintenance task management
 - Accept the task
 - Create information about the task
 - Provide all information about the
 - maintenance task
 - Close completed tasks

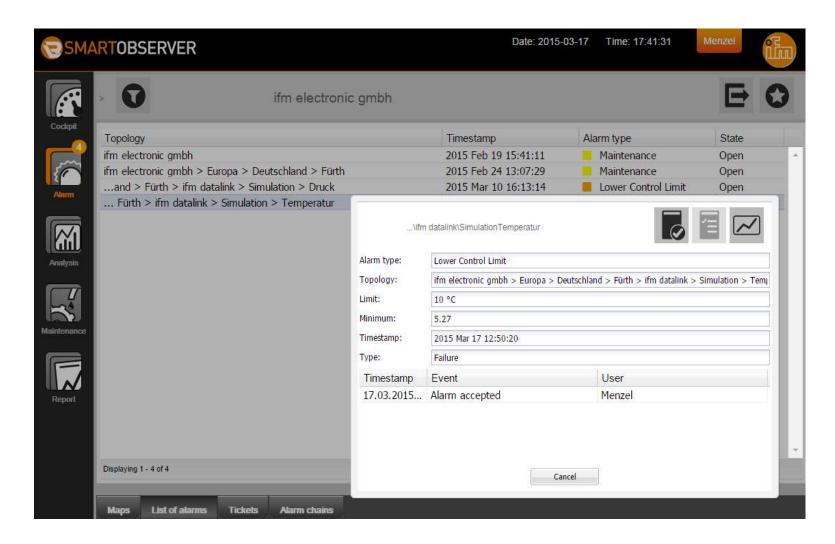








Alarm Management



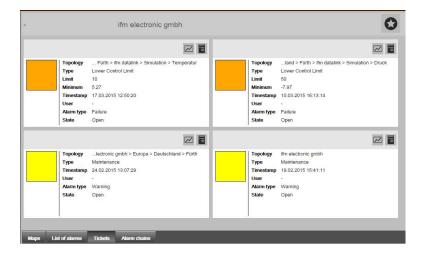




Alarm Management

- Set Alarm points and levels
- Assign chains to send Emails and SMS
- Manage the issue, assign and solve
- Alarm tickets
- Close tickets

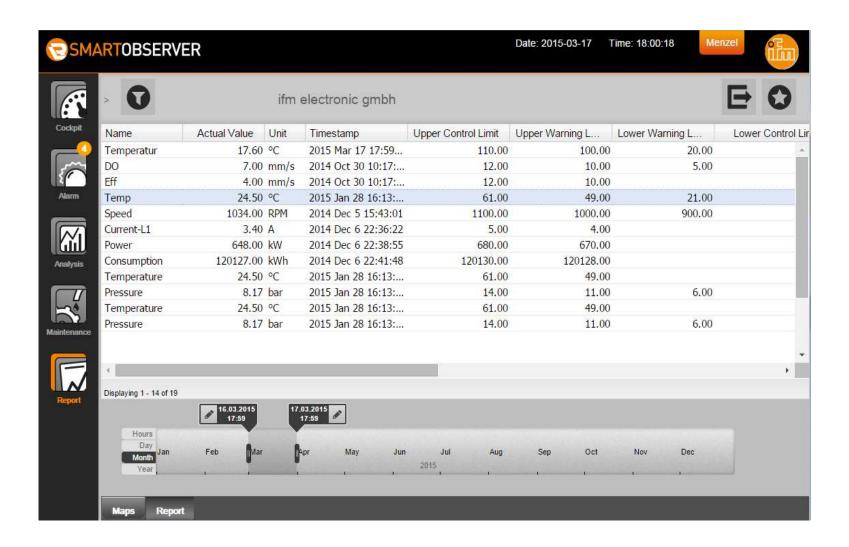








Reporting

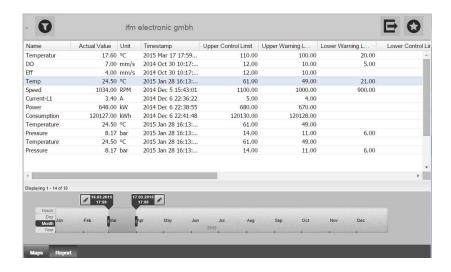


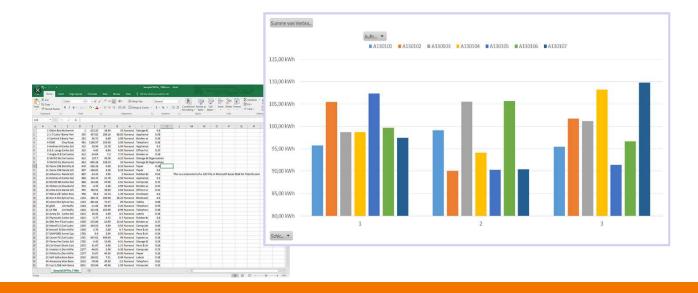




Reporting

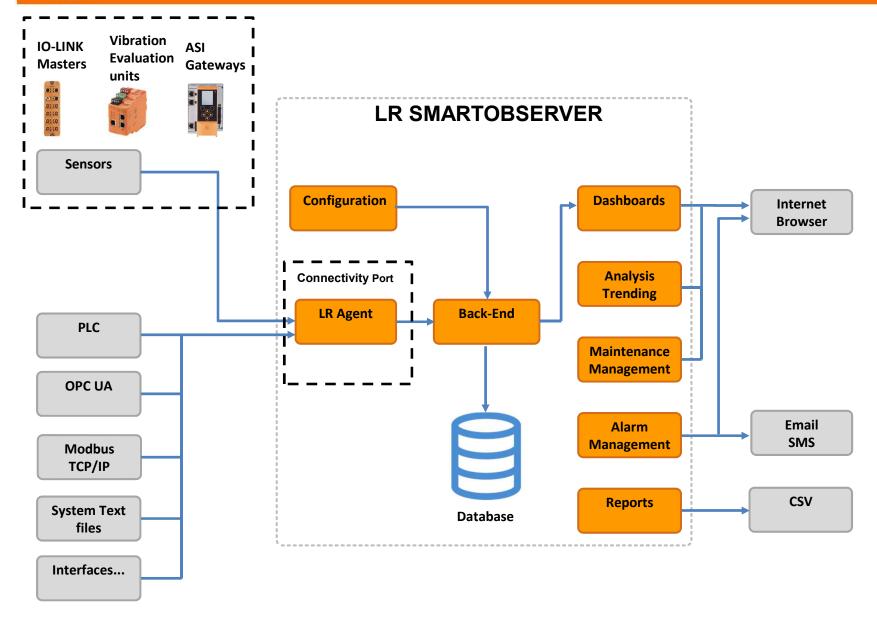
- All sensors in topology
- Important issues time stamped
- Selectable time period
- Export to CSV











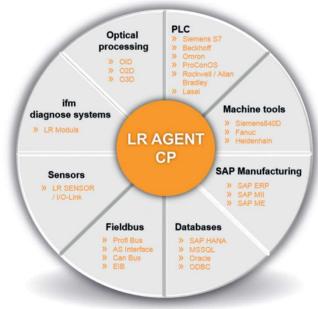




LR Agent – Versatile Interfacing

- Installed with Smart Observer onto PC
- Interface for Machinery , Plants and Systems
- Flexible data transfer independent of machine type
- Bidirectional data exchange
- Communication Interfaces can be configured by user
- Logic functions to create algorithms
 - Overall Equipment Efficiency (OEE)





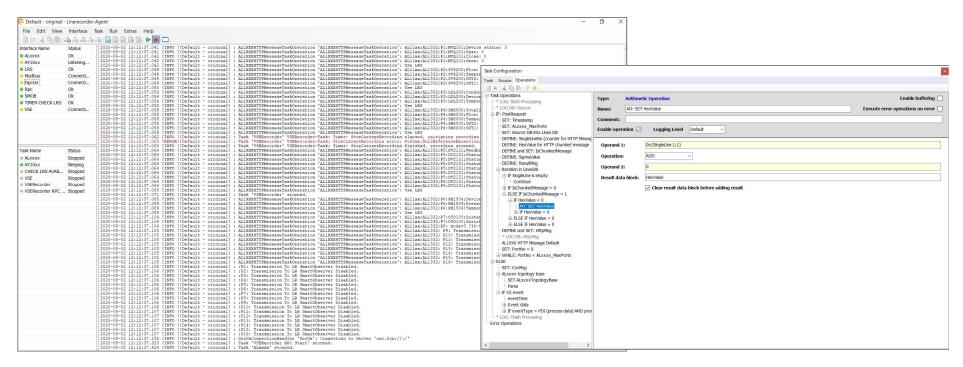
$$OEE = \frac{Actual\ Production\ running\ time}{Planned\ Production\ time} \quad \textbf{X} \quad \frac{Actual\ Performance}{Max\ Performance} \quad \textbf{X} \quad \frac{total\ zero\ defected\ product}{total\ product\ made}$$





LR Agent – Versatile Interfacing

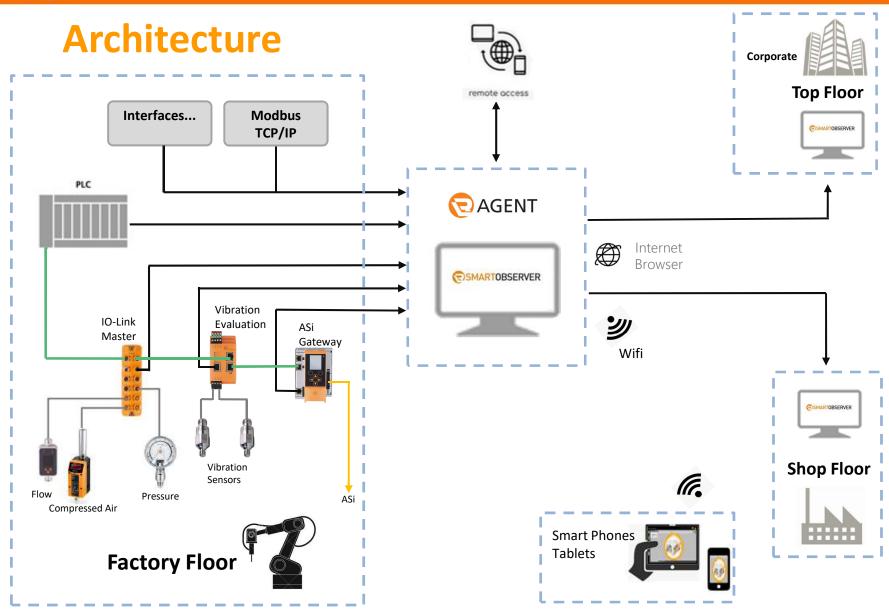
- Runs as a service in the background of the operating system
- Configure Interfaces and establish connections
- Read and write data
- Works with data blocks, rows and columns
- Create logical tasks















Applications and Benefits

Applications

- Stand alone monitoring systems
 - Machine OEE (Overall Equipment Effectiveness)
 - Production Counts
 - Monitoring Critical Values
 - Machine Runtime
- Energy Monitoring Systems
- VSE (Vibration Evaluation units)
- ...

Benefits

- Can be used in parallel with current systems
- Integrates with many protocols
- Eliminates the need to log data from a PLC
- Can not control outputs
- Cost Effective

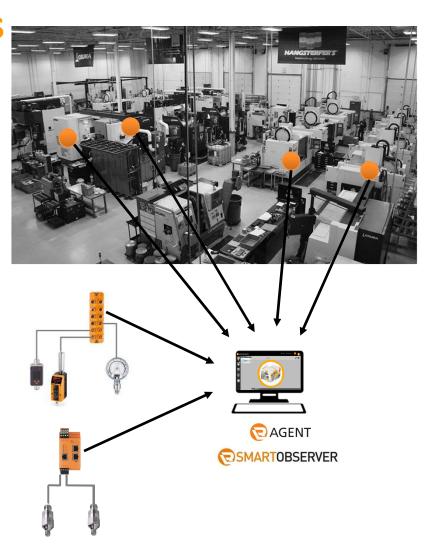












Questions &

Answers?







Webinar Schedule

05 August 2020 Smart observer - Versatile online monitoring

12 August 2020 ifm's New valve sensor - Continuous position feedback and diagnostics

19 August 2020 Compact Versatile Single Signal Lamp with IO-Link Technology

26 August 2020 IO Link Precise Pressure Sensor with Temperature Monitoring

See the next webinars at the link below:

https://www.ifm.com/za/en/za/webinars/2020







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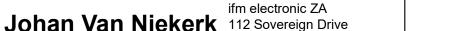




Thank you for participating

Please contact us:





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