SOURCES

[1] PWC (2016) | https://www.pwc.com/gx/en/technology/pdf/industrial-internet-of-things.pdf
[2] https://www.lte-anbieter.info/5g/
[3] IDG Research Services: Studie Internet of Things 2019

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Dräger

Up to **100 billion**
end devices are to be connected to the
Industrial Internet of Things by 2021[1]

Networked safety technology for industry 4.0

Dräger. Technik für das Leben®

Networked safety technology for industry 4.0

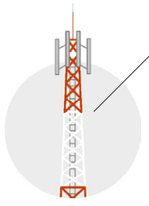
The digital networking of production facilities in industry is a global trend. Safety technology is also benefiting from digitalisation and the Industrial Internet of Things (IIoT). Networked gas detection technology, for example, increases the level of occupational safety through faster, more efficient and more robust processes.

The path to the smart plant is via the digitalisation of all industrial sectors, from production to logistics. The focus here is on networking systems, sensors and controls as well as the use of artificial intelligence. This also has an impact on safety technology: The digital networking of measurement technology and the linking of data creates completely new possibilities. In the future, information will be available in real time from a variety of sources – such as single-gas detection devices for personal protective equipment, devices for area monitoring, and stationary gas measuring sensors permanently installed in the plant.

The digital networking
of measurement technology and the linking of data creates completely new possibilities.

Interfaces between technological standards

Because networking technology is constantly evolving, interfaces that are compatible with many technological standards are important. The Industrial Internet of Things (IIoT) relies on established processes and new infrastructures (e.g. 5G networks).

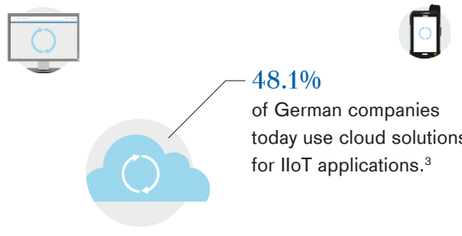


5G networks
will enable download speeds of up to 10 Gbps. This is a hundred times the data rate of 4G today.[2]

Networked technology can significantly improve core security processes such as the clearance measurement of areas: Instead of a paper-based procedure, measurement orders are assigned and executed digitally. This means that employees can be deployed more efficiently than before, occupational safety is further improved and at the same time sources of error in analogue data transmission can be reduced.

Real-time data transmission for a higher level of safety

The measurement result is transmitted in real time and displayed on a digital location map of the plant, as the data set also includes georeferencing. This contributes to a higher level of safety. Monitoring and control can also be locally decoupled using decentralised equipment such as smaller control stations and mobile terminals.



48.1%
of German companies today use cloud solutions for IIoT applications.[3]

Dräger supports the digitalisation of safety technology at the customer's site with innovative products and services. They also optimise system availability, for example through flexible, condition-based and preventive maintenance ("predictive maintenance") of gas sensor heads.

Solutions and Products

You know you are entering the Smart Plant (era) when you are equipped with Dräger products and solutions.

Dräger Polytron® 6100 EC WL
Flexible and cost-efficient: The new transmitter for continuous monitoring of toxic gases and oxygen. Completely wireless signal transmission and power supply included.

Dräger REGARD® 7000
Modular control unit: The newly developed control unit is suitable for gas warning systems of varying complexity and works with the HART® standard, amongst others.

Dräger GS01
Truly wireless, the GasSecure GS01 combines single-beam triple-wavelength infrared (IR) technology with extremely low power consumption, to provide fast hydrocarbon gas detection in the most demanding and hazardous of settings. The GS01 creates value for the customer with dramatically reduced installation cost and time, reliable infrared operation,
and calibration-free design.

Dräger ViewPro 7000
Dräger ViewPro 7000 is a visualisation software for data management and graphic representation of your Dräger REGARD® 7000 control system. Plant overviews, tables, alarm messages and diagrams provide an overview of measured values and the statuses of gas warning systems.

Dräger Exposure Monitoring
Live information from the field: Through intelligent calibration systems, such as the X-dock station, valuable data is produced as part of daily functional tests. In turn, this data can be used to effectively monitor employees in hazardous work areas. Moreover, it helps you to send reports automatically
as well as giving you a clear picture of alarms and exposures that have occurred.

Dräger Live Monitoring
Simplifying your operational processes: Remote monitoring offers you a supervised solution for maintenance work as well as saving you process steps such as.
Visualise measurement and fault data in real time using modern cloud-based systems.

Dräger X-am® 8000
Modern multi-gas detector: The new X-am optimises your clearance measurement process and is also available with Bluetooth module.

Dräger CSE Connect
A digital future solution for the secure and efficient clearance measurement process: The Dräger CSE Connect software solution digitises the exchange of information in the clearance measurement process. Data is transferred via a cloud connection between your smart phone app and a web application. The Dräger X-am® 8000 gas detector then communicates directly with the smartphone app. This helps you to manage your measurement tasks more efficiently and cost-effectively.