funktel GSM Security System
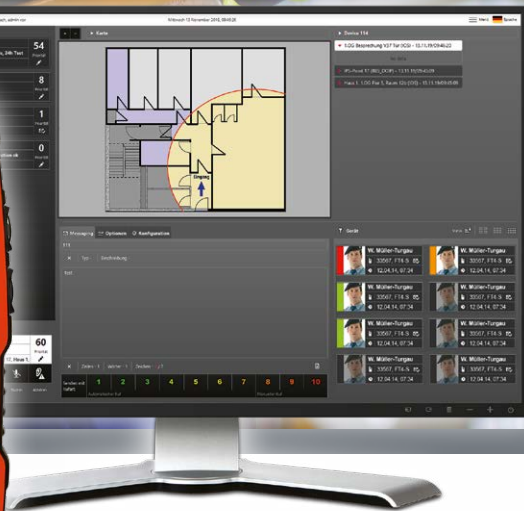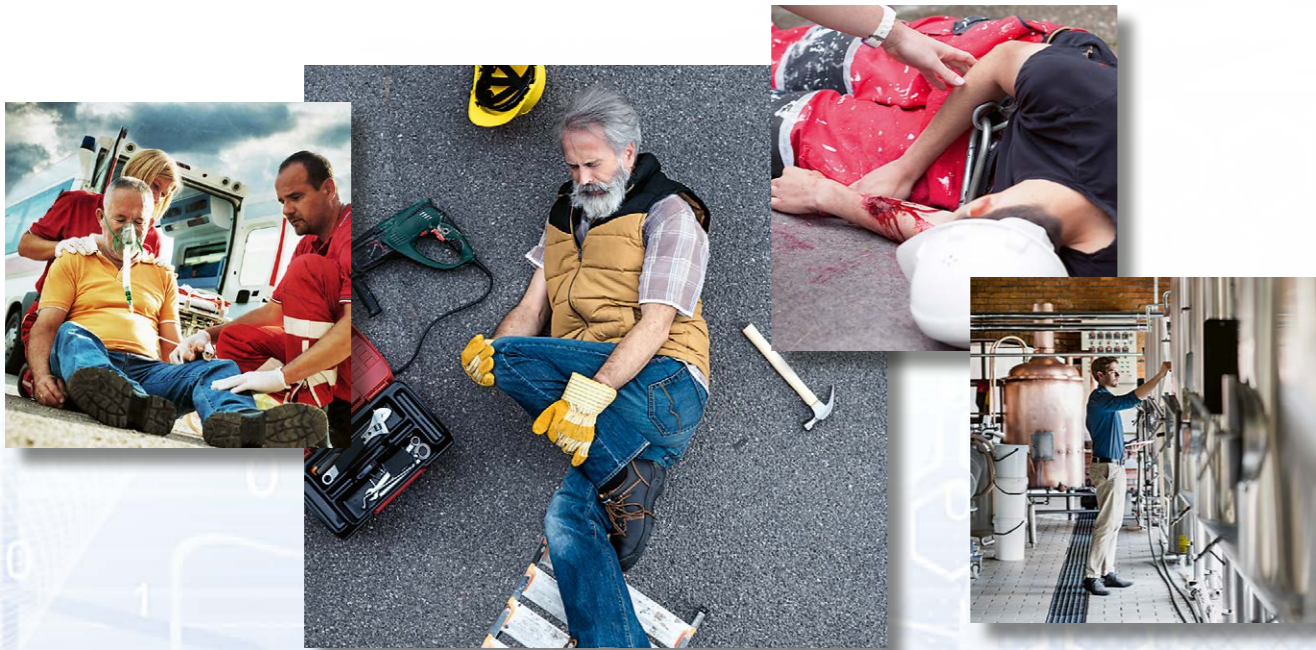
**The personal security system for the most demanding requirements:
Certified, easy to install, reliable.**

Bluetooth 4.0
Low Energy

funktel: In-house security of the highest standard —for more than 50 years.

The new GSM-based personal emergency signaling system: Safety—anytime, everywhere!

funktel Nucleus.ASP control point software

The new PES mobile devices for funktel GSS

■ In principle, employers have a responsibility to ensure the safety of their employees—especially by means of technical systems. Thanks to continuous progress towards automated processes and the more "care-giving" role of human operators of technical systems, the requirements for the safeguarding of personnel in solitary work environments are growing steadily: Mature, reliable personal security systems (Personal Emergency Signal systems or PESs) that can be operated in a handy and intuitive manner, that are robust and constitute a safe investment, that relay alarms of every type and that assure that assistance can be rendered as quickly as possible.

As the market leader for industrial security systems in Europe and with more than 50 years' experience, funktel is, thanks to its unique competency, the first choice for safety-critical, professional emergency call systems in today's world. Our solutions are constantly adapted to current requirements and satisfy the strictest certification —for power utilities or logistics operations, for authorities or administrations, for research and development and for manufacturing industries. funktel offers an individual, tailor-made solution and active support for every security plan in order to safeguard your company and your staff in an optimal manner.

A broad spectrum of components ensures good radio coverage and reliable availability in any conceivable environment: Offices, storage areas, machine shops or basements, building complexes covering an extensive area or widely scattered supply points.

In the event of an alarm our systems ensure the direct triggering of alarms, gather all relevant information and support your team to render assistance promptly.

funktel designs, installs and services safe, highly available PES systems for every situation and requirement —including certified explosion protection when handling dusts, gases or other hazardous substances.

■ The new GSM Security System by funktel: Maximum mobility, optimal protection, low capital investment.

You use today's nearly nationwide mobile network coverage (GSM) for optimal mobility and the rapid set-up of security solutions in factories or on industrial sites, as well as for mobile applications. Emergency assembly points can be established simply, quickly, cost-effectively and practically anywhere

The GSM Security System enables the rapid safeguarding not only solitary work places but also all types of industrial applications including those at remote locations, on greenfield construction sites, for a sales force or the logistics sector: funktel GSS is an individually configurable personal emergency signal system that uses available GSM coverage as a platform for your customized security solution—flexible, safe and highly scalable as required.

Alerting, localization, voice communication and alarm messaging offer the greatest safety for your employees.

Equipped with an alarm app, the robust PES handsets transmit personal alarms that have been triggered manually or automatically to the alarm control point as well as broadcasting alarm messages to additional PES devices. The location determined by means of satellite (GPS) can then be defined precisely by means of battery-powered, easy to install Bluetooth beacons—for optimal protection in hazardous environments.
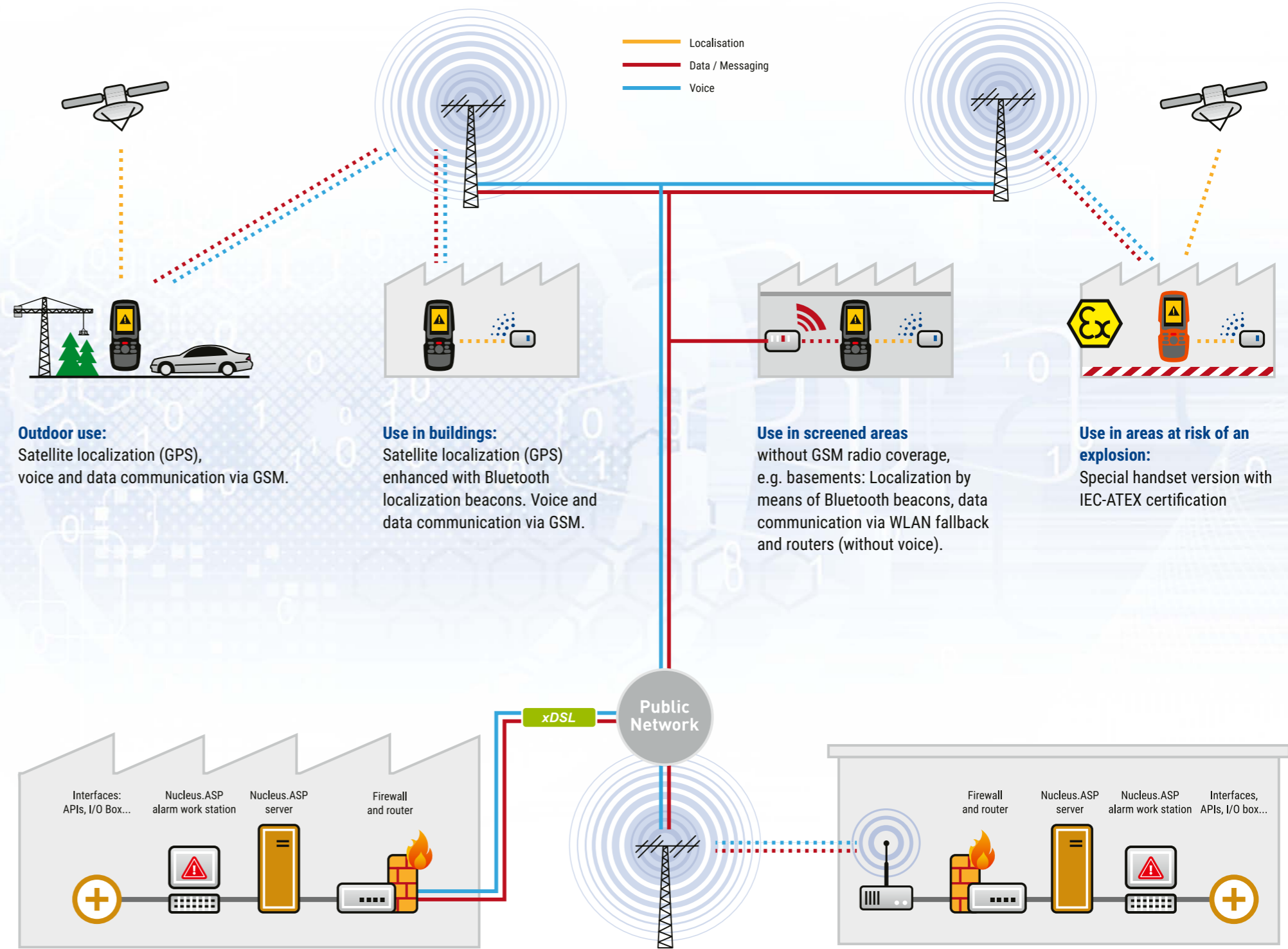
For areas in which the PES device cannot use a GSM network, (such as basements, tunnels or shielded areas) a data and localization connection can easily be upgraded via WLAN.

GSM SECURITY SYSTEM GSS

funktel GSM Security System: The flexible PES system for all kinds of mobile solutions.

System features

- Complete PES system with its own alarm control point for the safeguarding of solitary work places indoors and outdoors.
- Certified by the Employers' Liability Insurance Association (Germany) in accordance with DGUV 112-139 / DIN VDE V 0825-1 / -11
- Delay-free relaying of all alarms via the mobile network with WLAN fallback
- GPS satellite localization
- Indoor/outdoor area localization by means of easy to install Bluetooth beacons
- Alarm messaging with prioritized call modes
- Alarm triggering with automatic set-up of the GSM voice connection, receipt and reset function
- Self-monitoring of the complete system
- Guard management function (optional)
- PES system handsets with
    - Dedicated emergency call button
    - Extensive sensors for automatic alarm triggering Position, man-down and time alarm
    - Robust Android operating system with alarm triggering app that cannot be deactivated
    - Dust- and waterproof (IP 68)
    - Life check: Self-monitoring by cyclic self-testing of function, alarm sensors, battery and network availability
- Nucleus.ASP alarm system server with ergonomic control point work station
- Integration of interfaces for switching contacts, technical alarms and many more possibilities

Push alarm

Position alarm

55°

Time alarm

No-motion alarm

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Localisation

Data / Messaging

Voice

Outdoor use:
Satellite localization (GPS), voice and data communication via GSM.

Use in buildings:
Satellite localization (GPS) enhanced with Bluetooth localization beacons. Voice and data communication via GSM.

Use in screened areas
without GSM radio coverage, e.g. basements: Localization by means of Bluetooth beacons, data communication via WLAN fallback and routers (without voice).

Use in areas at risk of an explosion:
Special handset version with IEC-ATEX certification

Public Network

xDSL

Interfaces: APIs, I/O Box...

Nucleus.ASP alarm work station

Nucleus.ASP server

Firewall and router

Firewall and router

Nucleus.ASP server

Nucleus.ASP alarm work station

Interfaces, APIs, I/O box...

Alternative A: Operation from the alarm server and the alarm control point in the in-house network. Potential integration with other PES systems based on DECT or TETRA. Integration of GSM handsets via secure Internet connection (DSL).

Alternative B: Setting up a mobile or location-independent control point, for example in the on-site management of construction sites. Operation of alarm servers and an alarm control point by means of GSM modems—no infrastructure other than a power supply required.
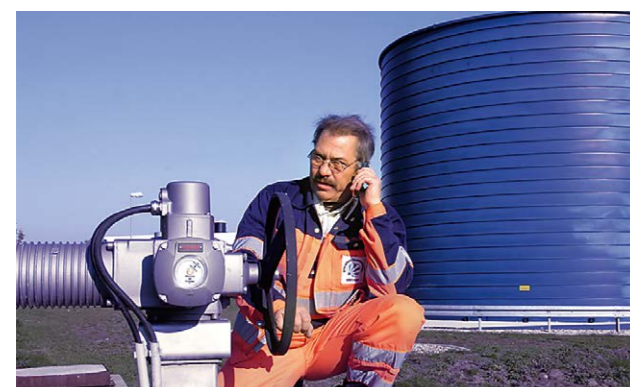
The system components: Ruggedized handsets, localization beacons, control center software—all certified.

Mobile phone RG310

Mobile phone IS320.1 Ex

Gehärtetes Android

Bluetooth 4.0 Low Energy

IP 68 Water & Dust

IP 68 Water & Dust

Personenalarm
RG310-2315 - 2315
Druckalarm 1

Personenalarm
RG310-2315 - 2315
Druckalarm 1

Hilfe kommt!

Personenalarm
RG310-2315 - 2315
Druckalarm 1

Alarm beenden!

BEENDEN

Eindeutige Signalisierung des Alarmzustandes

PES handsets RG310 and IS320.1 Ex with funktel PES app

■ The new personal emergency signal system for the funktel GSS PES system offers the "best of all worlds": Compact and light but also extremely robust, thanks to its IP 68 protection level. The robust Android operating system, which cannot be tampered with by the user, protects the devices from problems caused by software bugs or automatic updates—for reliable operation that cannot be compromised.

The shape of the housing and the classic keypad enables single-handed operation even while wearing gloves and without checking visually—thus offering optimal operating safety in comparison with smartphones with touch screens. In the case of environments at risk of an explosion—such as the utility or chemical sectors—an ATEX-certified version is available in the form of the IS320.1 Ex.

Highlights of the RG310 GSM PES handset

Personal emergency signal handset with a dedicated emergency call key as well as sensors for position, man-down and time alarms

Certified in accordance with DGUV 112-139 / DIN VDE V 0825-1 / -11

Ruggedized operating system with in-house PES firmware

Alarm localization via GPS satellite receiver as well as Bluetooth beacons

Life check: Self-monitoring by cyclic self-testing of function, alarm sensors, battery and network availability

Alarm triggering with automatic GSM voice call setup, receipt and reset function

Sensor test at time of PES login, automatic logout

Messaging and alarm display visually, aurally and by vibration

Robust, shock-resistant, water and dust resistant IP 68 and MIL-STD 810G compliant housing

Rubber-armored edge for shock absorption

2.4-inch display with RugDisplay glass, 240 x 320 pixels

MicroSIM card (MicroSD slot)

Camera function for first configuration via QR code

Bluetooth for audio accessories and indoor area localization

Integrated programmable guard management function

IS320.1 Ex protection version

Interchangeable battery:	Li-Ion, 1900 mAh
Carry cases:	various models: your dealer will be happy to advise

HANDHELD VERBINDEN

Wireless initial login to PES system via QR code

funktel Nucleus.ASP control point software

Highlights of the funktel Nucleus.ASP

Virtual alarm control point based on Java™

Flexible interfaces for all funktel system platforms (GSM, DECT, TETRA)

Integration of technical alarms and machinery sensors

Localization information by means of radio beacons, area localization and GPS

Display of localization information on individual maps or Open Street Map

Flexible and tiered alarm management

Messaging functions for groups and teams

High availability server platform with redundancy

Tamper-proof logging and much more

funktel BTO Bluetooth beacon

Highlights of the funktel BTO radio beacon

Standardized localization transmitter for funktel PES

Outdoor version with IP 65 and IP 54 indoor version available

Bluetooth 4.0 Low Energy Wireless Technology

Wireless installation with battery power (without power supply or data connection)

Long battery life

Wireless programming, even after installation, battery monitoring via app

Compatible with available alarm server systems

Wireless mobile router for use in variable alarm control points

Technical data of the MX880 GSM router

Mobile radio:	Dual-SIM
	LTE 800/900/1800/2100/2600 MHz
	UMTS/HSPA+ 900/2100 MHz
	HSDPA max. 42.2 Mbit/s download / 5.76 Mbit/s upload
	GPRS/EDGE 900/1800 MHz
	GPRS/EDGE max. 236.8 kbit/s download / 236.8 kbit/s upload
Throughput:	max. 100 Mbit/s download / 50 Mbit/s upload
WLAN:	IEEE 802.11 b/g/n (2.4 GHz)
	WEP/WPA/WPA2 encryption
	2T2R (max. 300 Mbit/s)
IP:	Optional fixed public or fixed private IP addresses (IPv4)
WAN fallback:	Backup solution for DSL connection
Security:	encrypted data communication via OpenVPN
Installation:	Tophat rail adapter (optional)

Technical specifications are subject to change

Security & Communication

MORE THAN 50 YEARS OF EXPERIENCE

Personal Security

Guard Round Control

Localisation

Explosion Protection

People Tracking

Messaging

With its head office in Salzgitter, funktel GmbH is a leading manufacturer of professional security and communication solutions based on DECT and TETRA for industry, public utilities and authorities.

We are specialists in personal emergency signal systems with mature know-how in developing and producing intrinsically safe devices that also satisfy the directives of the Employer's Liability Insurance Association (of Germany).

As one of the largest manufacturers of handsets for professional and industrial applications, our facility in Salzgitter develops and produces mobile terminals and certified personal emergency signal systems based on DECT and TETRA.

funktel GmbH
Windmuehlenbergstr. 20-22
D-38259 Salzgitter

Phone: +49 - 53 41 - 22 35-0
Fax: +49 - 53 41 - 22 35-709

www.funktel.com

kilovolt.net