

Smart Digitalization.

Smart-Ex[®] 03:
High Performance 5G Smartphone
for Hazardous Areas

The power of Pepperl+Fuchs—
certified and supported anywhere
in the world.



Your automation, our passion.

 **PEPPERL+FUCHS**



Use Synergies. Bundling Know-How for Mobility Beyond Company Boundaries.

Enterprise Mobility Solutions from Pepperl+Fuchs are geared towards the requests and needs of our customers and pave the way for future-oriented digitalization. They offer a competitive solution concept and portfolio from a single source to enable the next level of enterprise-centric digitalization. This opens up completely new possibilities and increases the safety, efficiency, and transparency of operations in both conventional and IIoT applications—driving the value of connected solutions for mobile employees and digital transformation and thereby Pepperl+Fuchs Enterprise Mobility.

Enterprise Mobility by Pepperl+Fuchs

Digitalizing Hazardous and Industrial Areas.

Pepperl+Fuchs Enterprise Mobility Solutions are designed to meet customer needs and drive future-focused digitalization. Offering a comprehensive one-stop solution—from hardware to MDM, 5G, and infrastructure partnerships—our portfolio enables seamless digital transformation in both conventional and IIoT applications.

By connecting mobile workers to digital workflows, we enhance safety, efficiency, and transparency across operations. Our solutions transform industrial devices (HazLoc and industrial-grade) into smooth, integrated workflows, empowering frontline workers with IIoT infrastructure.

Globally recognized as pioneers in explosion protection and sensor technology, Pepperl+Fuchs leverages decades of expertise to deliver tailored components and solutions that meet specific customer requirements.

Unique Value Proposition

Our integrated, cross-functional solution portfolio connects infrastructure, devices, and people, driving digital transformation while maintaining the highest safety standards. This results in greater flexibility, improved productivity, simplified processes and lower costs, with a single point of contact for all needs.

From components and mobile devices to MDM solutions, infrastructure and deployment services, our team of engineers supports the entire journey. And with our global service and support network, Pepperl+Fuchs is always close by, at all times.

Enabling the Digital Transformation

High Performance

- Qualcomm 6490 Processor
- 8 GB RAM, 128 GB storage
- 5G, 4G, 3G, and 2G
- WWAN
- Wi-Fi® 6
- Bluetooth 5.2
- GPS, GLONASS, Galileo, QZSS, BeiDou
- NFC

Power

- Powerful replaceable battery for a full working day (4400 mAh)



Zone 1/21 Zone 2/22 Mining icon

Class I Div. 1 Class II Div. 2 Globe icon

made with **Qualcomm** Technologies



A skilled workforce plays a vital role in industry today, especially in critical sectors such as energy, manufacturing, and chemicals. The integration of digital technology and IoT is enabling a connected workforce, ushering in a new era. Our Mobile Worker concept leverages mobile devices, asset tracking, analytics, and wearables to enhance both employee efficiency and safety. The introduction of the new hazardous area-rated 5G smartphone Smart-Ex 03 takes mobile working to a new level.

Camera

- 13 MP camera suitable for various use cases
- 5 MP front camera

Dedicated Keys

- User-programmable buttons for special functions, e. g. push-to-talk, camera, alarms
- Ergonomics, user-friendliness, and key position

Operating System

- Latest Android™ operating system
- Android Enterprise Recommended
- Google ARCore certified

Connectivity

- USB 3.1 Type-C
- Quickly and easily connected to monitor and accessories via Desktop Mode

Features

- 6-inch display: robust Gorilla Glass 3; high contrast and easy to read in sunlight
- Slim protective frame
- Smart battery concept
- Improved audio connection with additional pins
- Dual SIM (eSIM/Nano SIM)
- Part of holistic accessory concept
- Future-oriented for AR applications or digital processes
- Three-year service contract available

Our many years of experience guarantee safety, performance and reliability, delivering a sophisticated, smart solution for any digital application scenario from the experts in explosion protection, mobile computing, and telecommunications technology.

With the global service and support structure and remote support provided by Pepperl+Fuchs, sales specialists and system application engineers are available in more than 80 countries worldwide to solve any challenge.



For more information, visit
pepperl-fuchs.com/pf-smart-ex-03

Smart, Safe, Powerful

Equipped with 5G and Wi-Fi 6, the Smart-Ex 03 sets new standards for flexible deployment in public and private networks of mobile network providers or the companies themselves. This provides users at company locations around the globe with state-of-the-art communication and collaboration capabilities through fast and secure transmission of large volumes of data: from remote support to video conferencing, digital radio communication with minimal latency via push-to-talk over cellular (PTToC) and combination with an extensive range of peripheral devices.

Innovative monitoring of the smartphone's device status and an intelligent battery concept ensure smooth operation and fast problem solving. Convenient operation and Android 13, Android Enterprise Recommended, and Google ARCore put user benefits at the forefront. The Smart-Ex 03: 100 % Pepperl+Fuchs and 100 % investment protection for a compelling user experience. Make your processes smart!

 <p>Full transparency and safety: Complete European in-house product development</p>	 <p>Reliable partnership: Secure supply chain and fast delivery directly from stock through bundled competencies within the Pepperl+Fuchs Group</p>	 <p>Global service and support: International sales specialists and application engineers in over 80 countries, combined with innovative solutions and service concepts, and a three-year service contract</p>
 <p>Network flexibility and operator compatibility: Broad range of wireless carrier certifications and network approvals for global deployment</p>	 <p>Convenient operation in the field: User-friendly product and interface design for an exceptional user experience</p>	 <p>Investment and IT security: Android Enterprise Recommended certification guarantees Android security patches and upgrade options</p>
 <p>High performance: 5G functionality and Qualcomm processor provide security and reliability</p> <ul style="list-style-type: none">■ High data throughput, low latency■ Protection of sensitive corporate data through particularly secure and dedicated 5G campus networks	 <p>Assured uptime: Intelligent battery concept with monitoring of operating status enables condition monitoring and predictive fault detection</p>	 <p>Improved business processes: Tailored to the diverse software applications and fields of application such as communication, digital workflows and order management, operational safety or augmented reality</p>

Cellular Technology

5G technology represents a revolutionary leap forward in connectivity by enabling lightning-fast downloads, seamless streaming, and supporting emerging technologies such as augmented reality and the Internet of Things (IoT). It holds immense potential for industries and makes the hazardous area-rated Smart-Ex 03 ideally suited for use in maintenance and servicing work.

There are three different types of network technologies:

Public Networks

These are the familiar, traditional cellular networks. Many public networks have been supporting 4G LTE for a while and are now supporting 5G to further improve data throughput, low latency, and a better overall experience. The Smart-Ex 03 is ready to make use of this enhanced capability of 5G on a number of public networks.

Private/Campus Networks

These networks are structurally similar to the public networks with some differences. One of these differences is the RF bands that it operates on and who can access these networks. Depending on how the network is structured, the Smart-Ex 03 can be used to access a company's own private and secure network on 4G and 5G bands including the CBRS 4G LTE band 48 and 5G n48. In addition to a much wider area of coverage than a Wi-Fi network can provide, a private cellular network can provide enhanced security protecting sensitive data.

Network Slicing

While supported to some extent in 4G, 5G adds many advantages and abilities that 4G is not able to support. In a 5G environment, network slicing is a method of using a common physical infrastructure to support multiple virtual and independent networks. This allocation can be adjusted depending on the needs of the application, allowing for better control of the network and a better experience with a given amount of RF bandwidth. Each virtual network can have its own requirements, quality of service (QoS), security and latency requirements, all optimized for the function of the virtual network.

Advantages

- Highest security and reliability for users
- High data throughput with low latency
- Precise localization of objects in the field



Better Informed and Fully Supported

The Smart-Ex 03 offers companies advanced technology and outstanding connectivity, especially in industries such as oil and gas, chemicals, petrochemicals, pharmaceuticals, energy, and mining. In line with the Pepperl+Fuchs “Enterprise Mobility” concept, the smartphone ensures maximum efficiency in terms of digitalization and cost savings.



Application: Seamless and Effective Troubleshooting

Industrial communication depends on reliable data transmission from the field to the control level. The mobile worker receives an error message via Ethernet-APL on the 5G Smart-Ex 03 smartphone. Using unique identifiers, they can check which component sent the error message and gain access to valuable data from the field device. A management system makes it possible to manage systems and order spare parts from any location.



Watch the video:

pepperl-fuchs.com/pf-troubleshooting



Application: Digital Work Order Management

The Smart-Ex 03 enables the digitalization of various business processes, such as work order management for planning and prioritizing work orders. In this process, mobile workers receive work orders on their smartphones, each containing a list of work steps that need to be completed to fulfill the order. This allows companies to guide their mobile workers through the entire work order process. In this way, digital work order management maximizes worker efficiency and simplifies the repair or maintenance of equipment in plants.



Watch the video:

pepperl-fuchs.com/pf-digitalworkorder



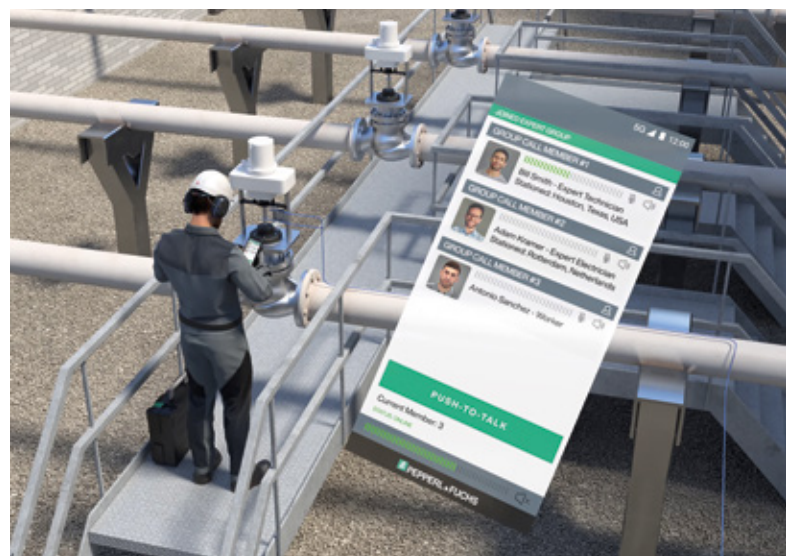
Application: Push-to-Talk Group Call

The Smart-Ex 03 enables encrypted and therefore secure, push-to-talk group calls with multiple people at different locations over 5G. This communication feature enables remote support for mobile workers and helps to carry out service and maintenance tasks in the field.



Watch the video:

pepperl-fuchs.com/pf-pttgroupcall



Innovative Solutions from a Single Source

Pepperl+Fuchs offers a range of coordinated peripherals, accessories, and software solutions as an ideal complement to the Smart-Ex 03.



Applications 4.0

- Inspection/maintenance
- Asset management/tracking
- Collaborative working
- Scanning/auto ID
- Process automation/operations
- Lone worker protection/localization (GeolP)
- Engineering/installation
- Augmented reality (AR)
- Security/safety
- Push-to-Talk over Cellular (PTToC)



Software

- User management
- Customized roles and rights
- Android Enterprise Recommended (AER)
- Android zero-touch
- Kiosk mode
- APKs
- API/3rd party



Hardware

Peripherals

- Scanner
- Camera
- Headset

Certification

- Ex certifications
- Regulatory
- Wireless certifications

Accessories

- Desktop charger/docking
- Spare battery
- Case
- Cradles



Safety

- Mobile worker
- Assets
- Data



Support

- Sales and application engineering
- Service level agreements
- Security patches
- Software updates



Digital Products and Services

- Preconfiguration/staging
- Mobile device management (over-the-air)
- Device analytics

Digital Products and Services

Digital Products and Services is a solution that combines automated staging, mobile device management, and device analytics. It can also be used as a full-fledged enterprise mobility management system if required.

At the customer's request, ecom's mobile devices can ship from the factory with predefined custom configurations such as security settings, applications, and wireless setup. This allows devices to be used anywhere in the world immediately upon delivery.

The devices can be managed via the ecom online platform and updated remotely at any time during operation without having to be sent to local IT staff or the head office.

Cloud servers hosted in Germany meet the highest data protection standards and guarantee high data availability and security.

One-time staging and enrolling can also be done internally via ecom production servers. If required, device diagnostics and analytics can collect real-time operational data and fault analyses to continuously monitor device statuses and fix malfunctions preventively or immediately.

Additionally, the platform analyzes historical data to detect critical software events, installations, and other safety-critical processes. Based on a statistical accumulation of events, correlations and causalities between software errors, geographical data, and Wi-Fi coverage can be determined.

Digital Products and Services is a ready-to-use service that ensures quality and security for all devices. This saves time and valuable resources.

For more information, visit pepperl-fuchs.com/pf-smart-ex-03



Staging and Enrolling

eCSL—Custom Service Load

- Custom device preconfiguration
- Delivered ready to use



Configuring ... **65** % complete



Upload complete



Configuring ... **27** % complete

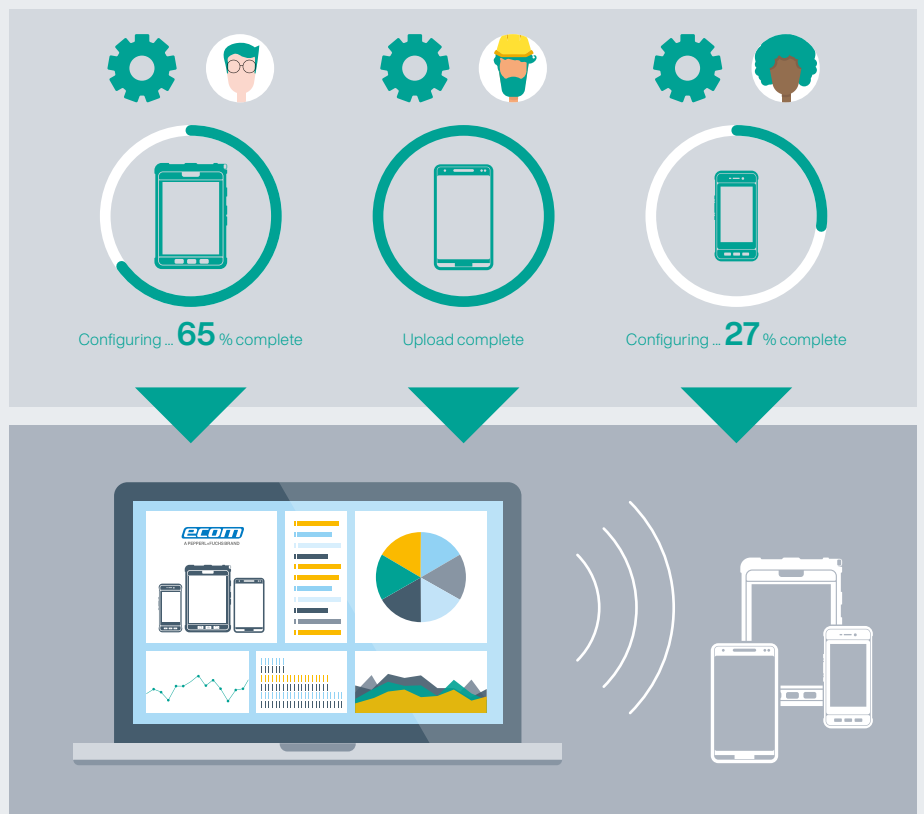
Configuring and Management

eMDM—Mobile Device Management

- Update devices around the world simultaneously

Device Diagnostics

- Analytics help avoid problems and correct errors



Your automation, our passion.

- Industrial Sensors
- Industrial Communication and Interfaces
- Enterprise Mobility
- Hazardous Area Products and Solutions

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