



## Intelligent and secure process visualisation in potentially explosive atmospheres

**Condition-based process management and control through to potentially explosive atmospheres: the Mobile Operations Concept from SIEMENS realises this important Industry 4.0 scenario using the leading tablet PC platform from BARTEC.**

The reliable process management of process plants is a basic requirement for consistent product quality and asset usability. In the course of the digital revolution, SIEMENS gives its customers new ideas, concepts and tools to enable plant units and modules to be monitored remotely and operated conveniently, guaranteeing asset performance. One of these is the Mobile Operations Concept.



### The user:

- SIEMENS AG
- Leading international technology group
- Operates in over 200 countries, focussing on the areas of electrification, automation and digitalisation

### The challenge:

- Windows-compatible mobile terminal equipment for safe, remote access to SIMATIC PCS 7
- ATEX approval for Zone 2 and Zone 1
- Unique plant identification
- Hot-swap tool-free battery change

### The solution:

- BARTEC Agile X as rugged mobile device
- Uniform tablet PC platform for Zone 1 / Div. 1, Zone 2 / Div. 2 and non-hazardous areas
- Integrated RFID reader
- Customised branding and software image

### Result and benefits:

- Integrated tablet PC solution for potentially explosive atmospheres and non-hazardous areas
- Expandability: connectivity, add-on modules etc.
- Windows Embedded: simple integration of customised software
- Integrated scan engine and mobile phone module
- Optional carrying system for greater security in the field

## The Mobile Operations Concept

The SIEMENS Mobile Operations Concept in conjunction with the SIMATIC PCS 7 process control system permits flexible and secure remote access to plant equipment during direct field use. As the mobile device for this future-oriented solution, the leading technology group chose a slim, rugged and flexible tablet PC platform which, thanks to a broad certification base, is also suitable for worldwide use in potentially explosive atmospheres.

### About SIMATIC PCS 7

The SIMATIC PCS 7 process control system combines a unique, scalable architecture with powerful engineering tools and many additional functions that can be seamlessly integrated, such as alarm management, process safety or asset management.

This permits end-to-end, extensive and safe automation of the entire production process – from goods receipt to goods issue, in process and manufacturing plants.

### Rugged hardware for potentially explosive and non-hazardous areas

At the end of an intensive, two-year test phase, SIEMENS decided in favour of the Agile X tablet PC platform from BARTEC. This is certified as standard in accordance with ATEX, IECEx and UL Class I. Further national approvals are possible at the request of the customer. BARTEC implements the "Process Industry Xpert Service Devices" branding for SIEMENS and supplies the devices ready to use with a customised image. In the Agile X, SIEMENS consciously chose a platform that can be expanded as required, not only by various connectivity options, but also through add-on modules or an innovative carrying system for greater security in the field.

### Secure plant identification with RFID

BARTEC incorporated an integrated RFID reader for unique plant identification. When the operator holds the mobile device close enough to the transponder, the plant unit is clearly identified, and the correct process image is automatically provided. This prevents operating errors.

Important properties for reliable use in the field furthermore include the hot-swap supported tool-free battery change, the optional mobile phone module and the integrated scan engine.

## Result and outlook

SIEMENS has found the ideal tablet PC platform for the Mobile Operation Concept through its partnership with BARTEC. Users of the innovative SIMATIC PCS 7 process control system benefit from a mobile, secure Industry 4.0 solution for condition-based process management that has been certified for all potentially explosive atmospheres.



« BARTEC is a long way ahead of the industry, impressing us with their expert advice, delivery capability and an integrated solution approach. The Agile X tablet platform is precisely what our customers need for secure, mobile access to the process images of their plant units. »

Vural, Pala, Digital Factory Division, Siemens AG

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**BARTEC**