MONITORING SOLUTION FOR UPS

ABB Ability™ SmartTracker
Comprehensive 24/7 Cloud-based monitoring for power protection equipment

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- • **Powerful Cloud-based platform**
- • **Performance monitoring of multiple installations and clear information of energy efficiency improvement opportunities**
- • **The "plug and play" devices make installation quick and easy**

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With 24/7 monitoring, ABB Ability™ SmartTracker helps customers in every area of business avoid costly downtime due to surges, power outages, or other power events.

Operational risk is lifted from your shoulders and delegated to ABB so you can concentrate on your primary business: running a successful and profitable enterprise.

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ABB Ability™ SmartTracker
Comprehensive 24/7 Cloud-based monitoring for power protection equipment

As a market leader in power protection equipment, ABB has a solution for every situation to ensure continuous supply of high quality power to mission critical equipment and processes.

Now, with ABB Ability™ SmartTracker, ABB can give you complete peace of mind that your uninterruptible power supplies (UPSs) are delivering the top performance for which it was designed.

ABB Ability™ SmartTracker oversees site performance, analyzes collected data, predicts equipment condition trajectories and recommends corrective actions to avoid problems. As well as implementing an effective maintenance strategy, ABB Ability™ SmartTracker also ensures equipment runs as efficiently as possible, saving energy and reducing greenhouse emissions.

Best-in-class field support as expert by your side

Cloud-based platform

24/7
Full access to information anytime

Fulfills stringent cyber security requirements

Equipment runs as efficiently as possible, reducing CO_2 emissions

Understanding your power protection devices

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01 With an intuitive web app interface via smartphone, tablet or PC, ABB Ability™ SmartTracker makes it simple to oversee site performance and supervise the electrical system.

An expert by your side
With SmartTracker, ABB can monitor your power protection equipment 24/7. You can relax as ABB promptly picks up any alarms or situations that might need attention. Nothing will be missed. It is like having an expert by your side, day and night.

SmartTracker is a powerful Cloud-based monitoring platform that uses the ABB Ability™ Cloud solution, which already benefits many other ABB clients, such as the world's biggest banks, retailers and sport event organizers. In the Cloud, hardware and software are abstracted from the client's location, improving performance, reliability and security.

ABB Ability™ SmartTracker's platform has been designed from the ground up with cyber security in mind. ABB's world-class cyber security protocols are applied in SmartTracker, protecting connections, login processes, and password and user management.

Features and highlights
The solution is scalable and new assets can be added or reconfigured with a minimum of fuss.

With ABB Ability™ SmartTracker the user can monitor voltages, currents, frequencies and other important device life signs. Monitored parameters include (*):
• Battery temperature
• Earth leakage current
• Fan speed variation
• Ambient humidity
• Output voltage behavior
• Output power changes
• Internal heat sink temperatures
• Output current variation
• Ambient temperature

ABB Service support

ABB Network Card

UPS

Cloud Platform

Facility Manager
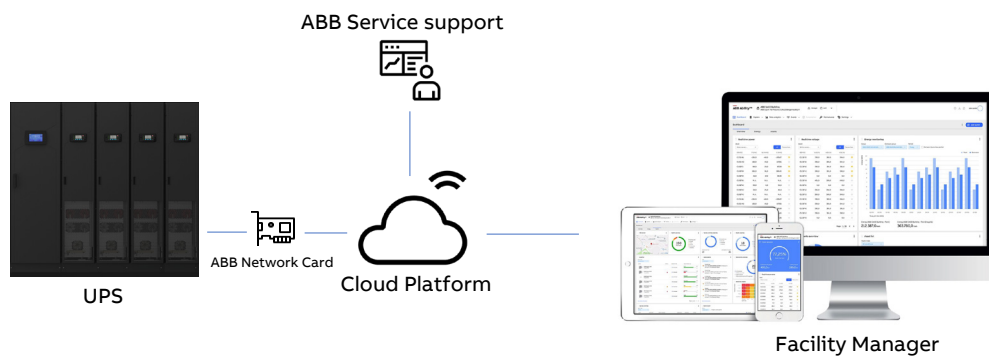
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(*) might vary based on UPS model

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01 Example one of asset
status dashboard

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02 Example of
performance
monitoring report
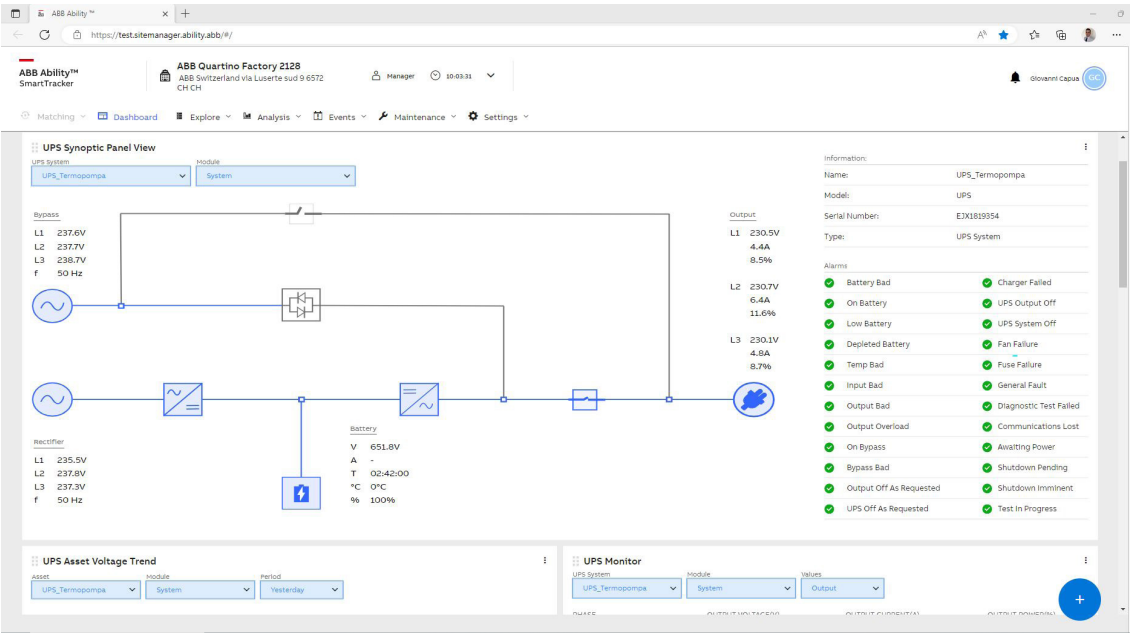
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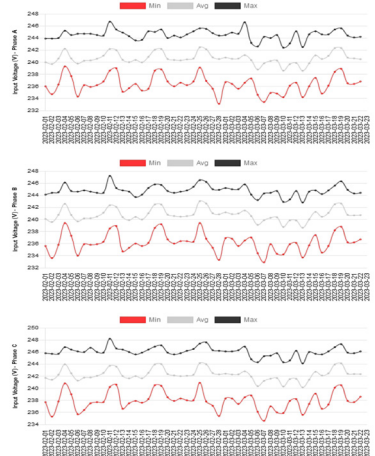
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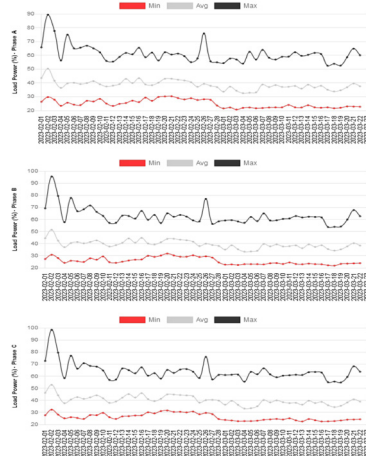02

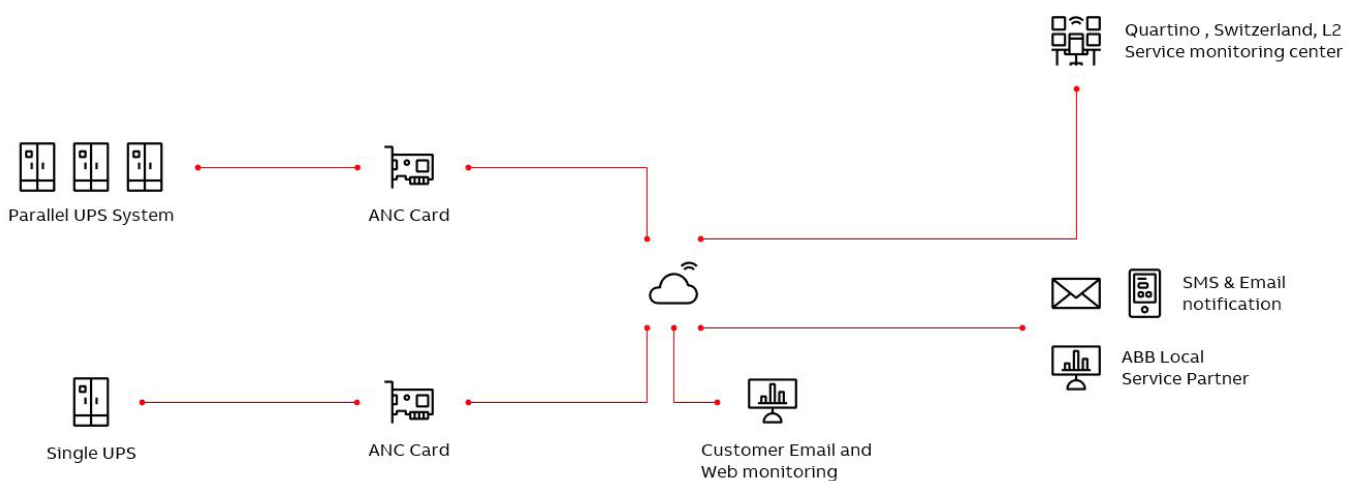# A secure, proprietary monitoring solution

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01 ABB Ability™
SmartTracker example
architecture

The design philosophy of ABB Ability™ SmartTracker places great emphasis on reliability and security. For this reason, SmartTracker was developed by ABB itself. Internal development further ensured the integrity of the cyber security aspects and allowed our team to tailor a solution that precisely suits the power protection product world.

And product support in the field is simplified as ABB retains all the expertise, right down to the very last detail. The use of the ABB Ability™ Cloud infrastructure further ensures the integrity of SmartTracker.

In addition, product upgrades or improvements can be made by ABB without reliance on third-party suppliers, where there could be delays, misunderstandings, or compatibility problems.

Quartino , Switzerland, L2
Service monitoring center

Parallel UPS System

ANC Card

SMS & Email
notification

ABB Local
Service Partner

Single UPS

ANC Card

Customer Email and
Web monitoring

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01

Connectivity solutions
Integrated and plug-and-play architecture

ABB Ability™ SmartTracker does not require engineering, helping users avoid the cost and time-consuming setup of an energy and asset management system involving many components. For the UPS product range, just the ABB network card has to be implemented into the UPS. For the power conditioning and power distribution products this simply involves mounting an Ability™ Edge Industrial gateway module.

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01 ABB ANC
Network Card

ABB ANC Network Card

For the UPS product range, the only additional hardware needed to implement ABB Ability™ SmartTracker is ABB's proprietary, plug-and-play ABB ANC Network Card.

The ABB ANC Network Card connects the user's power protection infrastructure to the ABB Cloud infrastructure where ABB Ability™ SmartTracker resides and does its work. The card's interface allows the user to monitor their power protection equipment via ABB Ability™ SmartTracker at anytime from anywhere. The ABB ANC Network Card's hardware and software meet the most stringent ABB cyber security requirements and are designed to guarantee the highest robustness against cyber-attacks.

Key features of the ABB ANC Network Card
- Secure boot feature with dedicated TPM 2.0 (ISO/IEC 11889) sensor. TPM is an internationally recognized standard that is applied to the dedicated crytoprocessor on the card. This secure microcontroller has integrated cryptographic keys that ensure the security of the hardware.
- Access via browser HMI or network.
- Supported protocols: Modbus TCP/IP, http, Modbus RS485, SNMP V2 and V3, SMTP and Remote Syslog.
- Individual UPS module visualization of up to 30 modules.
- Multilanguage localization (English, French, Spanish, German, Italian).
- Designed and dedicated to work with ABB Ability.
- Available local HMI connection.
- Easy to configure and provision through intuitive wizard.
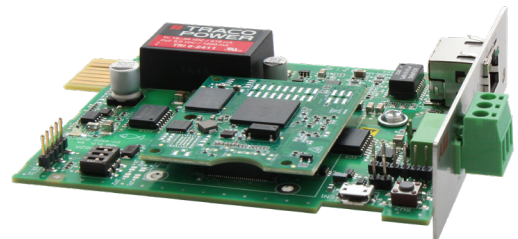
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Because the ABB ANC Network Card features proprietary ABB technology and is produced by ABB, ABB has full control of updates and software enhancements. Any supply issues due to third parties are eliminated. ABB can provide in-house support for card troubleshooting. The card is designed to work with older UPS models.

The ABB ANC Network Card is a connectivity platform that simplifies ABB's offering since just one card fits all ABB three-phase power protection products, making inventory management, updates and installed base management much more straightforward.

SmartTracker – the only power protection monitoring tool you will ever need

ABB Ability™ SmartTracker is a market-leading monitoring tool for UPSs. With an intuitive web app interface accessible via smartphone, tablet, or PC, SmartTrack-er uses ABB's Cloud solution to deliver a cost-efficient, plug-and-play platform with add-on and premium services.

ABB Ability™ SmartTracker delivers:
• A dedicated solution for power protection equipment
• A general view of assets
• Vital data and life signs
• Programmable automatic and periodic reporting
• Data analytics and historical data
• 24/7 remote monitoring by ABB experts
• Advanced data and notifications for user and service team monitoring devices
• Full Cloud capability and associated world-class ABB cyber security
• Ease of use through ABB proprietary network card
• Widgets and a graphical interface designed to give a better understanding of UPS condition at first sight

With SmartTracker, ABB (both the local presence and the factories) supervise the customer's asset 24/7 and will proactively call (or e-mail or text) the customer if there is an alarm or anomaly. Connectivity is via a dedicated ABB network card that can handle large data sets.

With 24/7 monitoring, ABB Ability™ SmartTracker helps customers in every area of business – such as healthcare, industry, data centers, financial institutions, or transportation – avoid costly downtime due to surges, power outages, or other power events. SmartTracker brings you complete peace of mind by constantly analyzing data from your power protection equipment to optimize energy use and predict any upcoming issues or maintenance requirements. Operational risk is lifted from your shoulders and delegated to ABB so you can concentrate on your primary business: running a successful and profitable enterprise.

ABB ANC Network Card
Technical specifications

	ABB ANC Network Card	ABB ANC-L Network Card
Article number	4NWP106923R0001	4NWP107801R0001
Product compatibility		
MegaFlex DPA IEC	✓	
DPA 500 IEC	✓	
DPA 250 S4 IEC	✓	
DPA UPScale ST/RI	✓	
Powerscale IEC	✓	
PowerWave 33 IEC	✓	
PowerLine DPA	✓	
TLE Series UL		✓
MegaFlex UL		✓
SG Series IEC		✓

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