

Product manual

MyRemoteCare Mobile App User guide



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1 Introduction

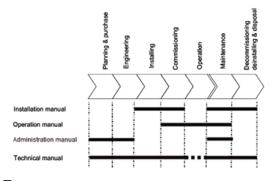
01 The intended use of manuals in different lifecycles The user manual contains instructions on how to operate MyRemoteCare mobile app (later called only MyRemoteCare App), once the system is installed, and once the plants under monitoring have been commissioned. The manual provides instructions for monitoring connected plants using MyRemoteCare App.

Intended audience

This user manual addresses the operator who operates with MyRemoteCare App.

The operator must be trained in and have a basic knowledge of how to operate the MyRemoteCare diagnostic system. The manual contains terms and expressions commonly used to describe this kind of equipment.

Product documentation set



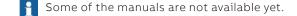
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The Installation manual contains instructions on how to install MyRemoteCare system. The manual provides procedures for software installation for ABB personnel only. The chapters are organized in chronological order in which the software should be installed.

The Operation manual contains instructions on how to operate MyRemoteCare App once it has been commissioned. The manual provides instructions for monitoring the plants, and setting on the software. The manual also describes how to identify errors or problems to determine the cause of a fault.

The Administration manual contains instructions on how to service and maintain the software platform. It contains all the application and functionality descriptions.

The Technical manual contains all the functional and implementation details of MyRemoteCare system.



Revision history

Document revision/date	Product series version	History
2018-04-30	1.0	First release



Download the latest documents from the ABB web site.

Related documentation

Product series- and product specific manuals can be downloaded from the ABB web site.

Symbols

- The electrical warning icon indicates the presence of a hazard which could result in electrical shock.
- The warning icon indicates the presence of a hazard which could result in personal injury.
- The caution icon indicates important information or warning related to the concept discussed in the text. It might indicate the presence of a hazard which could result in corruption of software or damage to equipment or property.
- The information icon alerts the reader of important facts and conditions.
- The tip icon indicates advice on, for example, how to design your project or how to use a certain function.

Although warning hazards are related to personal injury, it is necessary to understand that under certain operational conditions, operation of damaged equipment may result in degraded process performance leading to personal injury or death. Therefore, comply fully with all warning and caution notices.

2 MyRemoteCare overview

02 Communication Architecture

Overview

MyRemoteCare is ABB's online continuous condition monitoring system that supports the implementation of the condition-based maintenance services.

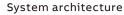
MyRemoteCare offers:

- Online asset health monitoring and analytics
- Managing and evaluating of asset condition and performance level
- Condition-based and proactive maintenance planning

With the above offerings, MyRemoteCare brings the following advantages:

- Reduce operational costs by optimizing maintenance scheduling
- Reduce downtime and increase production time
- Reduce risk of failure by detecting and generating warning at early stage
- Increase service availability, reliability, and safety

In today's environment, cybersecurity is very critical to ABB and its customers. ABB commits to fully focus on all cybersecurity challenges and to take all required actions to inform its customers about the cybersecurity risks.



MyRemoteCare system is based on a modular, flexible, scalable, and highly available architecture.

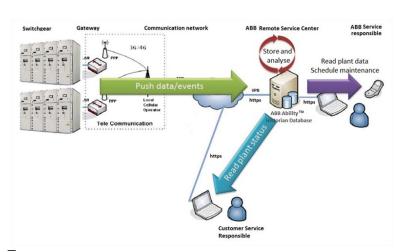
Data collection of MyRemoteCare composes of one or many remote data collectors (or gateways) which are capable of pushing data to MyRemoteCare server either by scheduling or on events.

Every single data collector node or gateway is independent of each other, so that a broken or communication loss does not distract the data transmission of the other. Once the broken node is restored and online, data is back-synchronized automatically.

Figure 2 depicts the system architecture of MyRemoteCare where MyRemoteCare gateways connect and push measurement and events data to server.

MyRemoteCare server consists of several service modules such as data collection service, notification and alarm service, report generation service, and scheduling service. Processed data are stored in database for further analysis and/or consumed by sophisticated performance analyzing algorithms.

MyRemoteCare servers are managed by ABB data center; therefore, standard data backup plan, disaster recovery plan, etc. are strictly followed.



2 MyRemoteCare overview

Web-based access

MyRemoteCare is a web-based application. Users can access to MyRemoteCare web application from any computer or mobile device that connects to the Internet using a standard web browser.

Advantages of MyRemoteCare being a web application are:

- Access from anywhere in the world with internet connection
- Centralized and secured data storage managed by ABB data centers

Single web application that is able to reach out to many devices with different Operating System (Windows, iOS, Android)

Data security and privacy

Technological advancements and breakthroughs have caused a significant evolution in the electric power grid. As a result, the emerging "smart grid" and "Internet of Things" are guickly becoming a reality. At the heart of these intelligent advancements are specialized IT systems - various monitoring and automation solutions such as monitoring and diagnostic systems. To provide end users with comprehensive real-time information, enabling higher reliability and greater control, automation systems have become ever more interconnected. To combat the increased risks associated with these interconnections, ABB offers a wide range of cyber security products and solutions for automation systems and critical infrastructure.

MyRemoteCare infrastructure has been designed to secure completely the data flow between plants and ABB service center, using the state-of-the-art of ICT (Information and Communication Technology) market. To counter cyber security risks, open IT standards are equipped with cyber security mechanisms. These mechanisms, developed in a large number of enterprise environments, are proven technologies. They enable the design, development and continual improvement of cyber security solutions for automation systems, including monitoring and diagnostic applications.

ABB understands the importance of cyber security and its role in advancing the security of distribution networks. A customer investing in new ABB technologies can rely on system solutions where reliability and security have the highest priority.

Reporting of vulnerability or cyber security issues related to any ABB product can be done via cybersecurity@ch.abb.com.

The user's access to the data on the server is restricted by authorization levels, and the connection is secured and encrypted (SSL technology). Therefore, the data is strictly visible only to authorized personnel.

ABB does not collect and store any information about energy production or consumption. MyRemoteCare system tracks only the life of monitored equipment applying predictive-maintenance algorithms.

This section guides you through the basic process and usage of MyRemoteCare App.

Installation

To download and install MyRemoteCare Mobile App, go to:

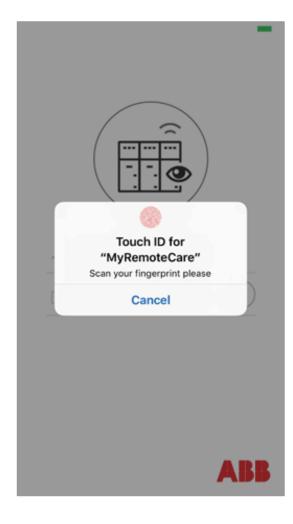
https://myremotecare.cn.abb.com

Login

In the login page, please wait until the ABB Single-Sign-on page to pop up or the Touch ID login tag shows.



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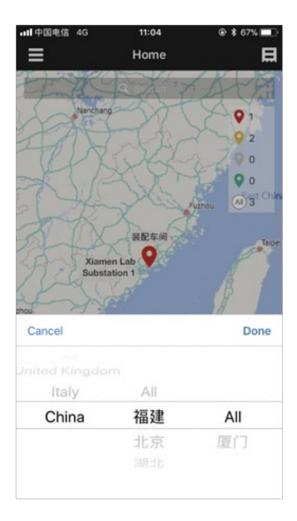
Map navigator

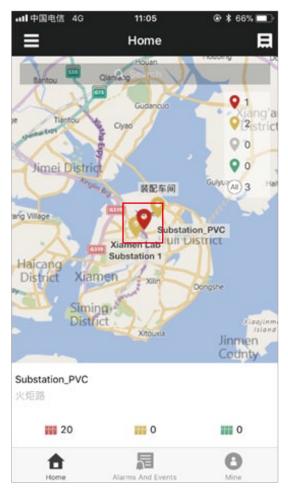
Monitoring substations can be viewed on map by their locations. Each substation on the map is represented by a color-coded pin that reflects its health status:

- Red: alarm status
- Yellow: warning status
- Green: normal status
- Gray: disconnect status

User can click on the button at the bottom side (upward arrow) of the map to open up the substation filter. The substations shown on the map will be filtered out according to your selection.







When clicking on a substation on the Map, an overview of that substation will be shown.

On the upper right corner of the map, there is an overview of all substation status, which user can use to filter substations by their status.





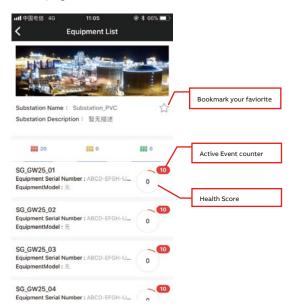
Substation list

To toggle between map view and list view, click on the button at the right of the top title bar. The list view presents the substations in tabular form, instead of location on the map. Filtering function on list view works the same way as filtering on map view.



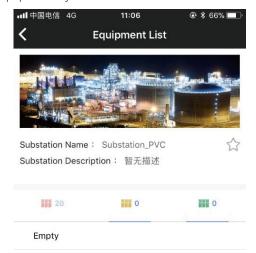
Substation detail

Clicking on the substation card in the mapview or in the substation listview will enter the substation detail page.



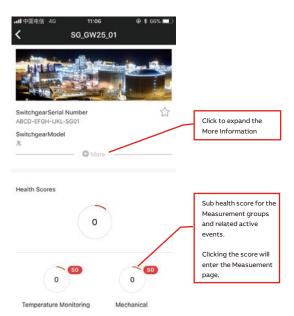
The substation detail view gives the overview information of equipment in that substation. It lists all the equipment with their current status and general information.

Below the substation information card, summary of its equipment grouped by status shows how many assets are in Alarm, Warning, and Normal states. User can click on status icon to filter equipment by their status.

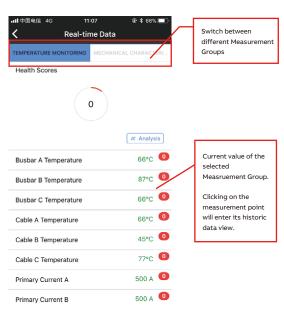


Equipment detail

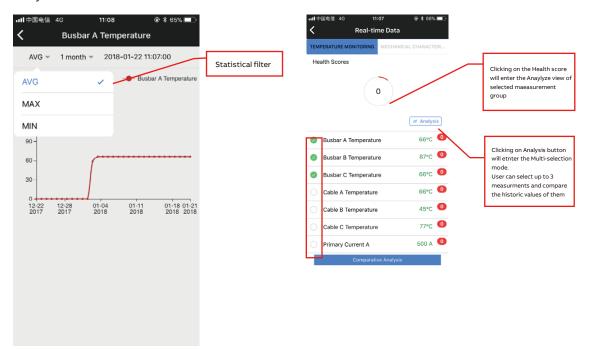
Clicking on one of the equipment card will redirect to the equipment page.

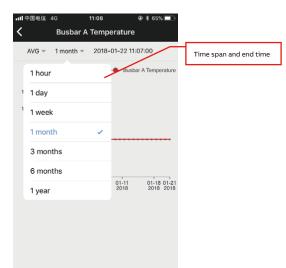


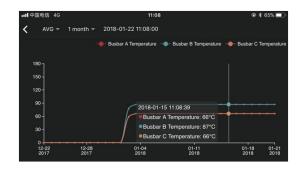
Measurement value



Analysis







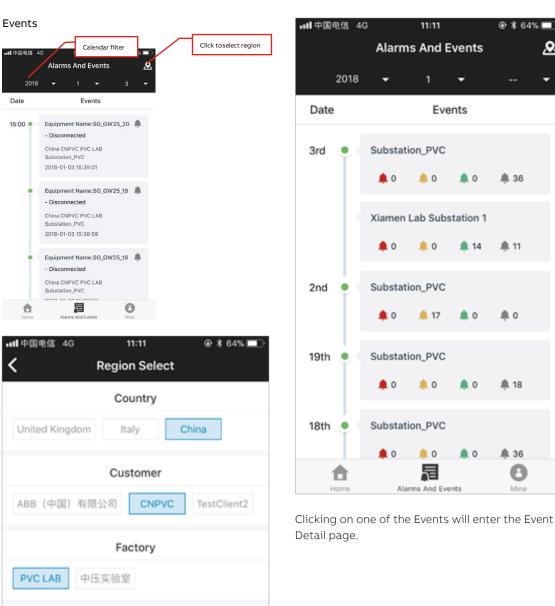
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Station List

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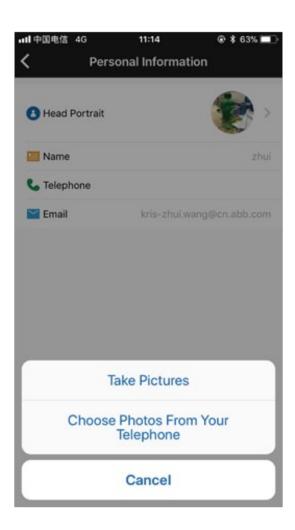
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User Profile

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User can add substation or equipment to his/her favorite collection for quick access later on.

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Footprint

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Settings

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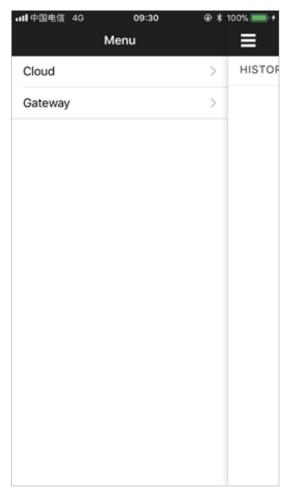
4 Gateway connection operation

MyRemoteCare Mobile app can also be used to monitor local equipment that are connected to a MyRemoteCare gateway. To monitor local equipment, the app can connect and retrieve data directly from a local gateway. Once the app is connected to the gateway and user is authenticated, the app works the same way as it is connected to the Cloud server.

Type of Connection

To select connection type, click on Menu button on the left of title bar, then select Cloud for Cloud server connection, or Gateway for local connection.





4 Gateway connection operation

User will be required to enter a Gateway IP.

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Wi-Fi setting

MyRemoteCare gateway provides Wi-Fi access point for app local connection. To join the gateway Wi-Fi, use local settings on your mobile device.

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4 Gateway connection operation

Login

Local authorization is required to enter.

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After sucessful connection and login, user can monitor the equipment that are connected to this gateway.

The view of App connected to MyRemoteCare Gateway is the same with view of App connected to cloud which are described in Chapter 3.

5 System requirement

Supported operating systems

Operating system	Recommended version	
Apple iOS	9.0 or later	
Android		

6 Glossary

Ethernet	A standard for connecting a family of frame-based computer networking technologies into a LAN
Firmware	System software or hardware that has been written and stored in a device's memory that controls the device
НМІ	Human-machine interface
HW	Hardware
IEC	International Electrotechnical Commission
IEC 61850	International standard for substation communication and modeling
IED	Intelligent electronic device
IP	Internet protocol
IP address	A set of numbers between 0 and 255, separated by periods. Each server connected to
	the Internet is assigned a unique IP address that specifies the location for the IP
	protocol.
Modbus	A serial communication protocol developed by the Modicon company in 1979.
	Originally used for communication in PLCs and RTU devices.
Modbus RTU	Modbus link mode. Character length 11 bits.
Modbus TCP/IP	Modbus RTU protocol which uses TCP/IP and Ethernet to carry data between devices
PC	Personal computer; Polycarbonate
RJ-45	Galvanic connector type
RoHS	Restriction of the use of certain hazardous substances in electrical and electronic
	equipment
RS485	Serial link according to EIA standard RS485
STP	Shielded twisted-pair
SW	Software
TCP/IP	Transmission Control Protocol/Internet Protocol
WAN	Wide area network
WHMI	Web human-machine interface

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Warranty

Please inquire about the terms of warranty from your nearest ABB representative.



ABB Xiamen Switchgear Co., Ltd.

ABB Industrial Park, Torch High-Tech Zone, No. 319, Xiamen, Fujian, P.R.China Tel: +86 0592 602 6033 Fax: +86 0592 603 0505 Zip Code: 361006 Service HotLine: 800-820-9696 400-820-9696

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