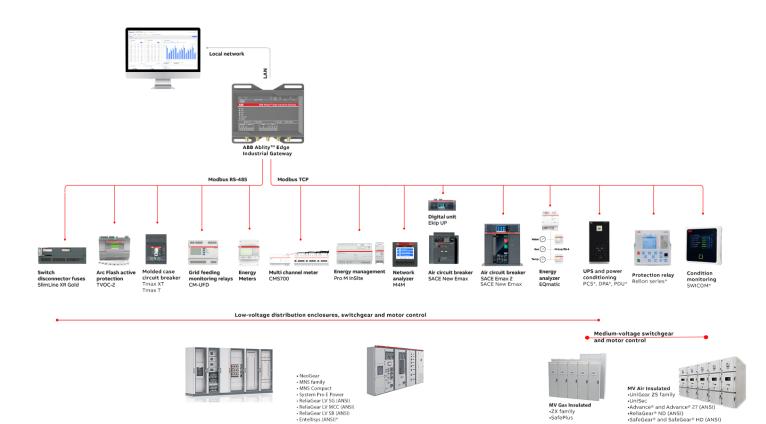


# ABB Ability<sup>TM</sup> Edge Industrial Gateway

Local View



\*Coming soon

## Local view

ABB Ability<sup>™</sup> Edge Industrial Gateway runs ABB Ability<sup>™</sup> Energy and Asset Manager solution on-premise with local data collection and viewing possibilities via local web server.

Local View version ensures:

- data security keeping the full database on the gateway server
- ease of use with pre-configured device integration and quick commissioning
- energy efficiency thanks to the immediate use of ABB Ability<sup>™</sup> Energy and Asset Manager solution with Current, Voltage, Power and Energy widgets for the devices/device groups and connected asset list with connection status.

More information about ABB Ability™ Energy and Asset Manager solution are available <u>here</u>.

#### Architecture notes

By default local web view is accessible from the Ethernet port ETH1 which is connected to the same network where devices are present. Following a dedicated cybersecurity procedure\*, it can be enabled also for the second Ethernet port ETH0 which can be connected to another local network. Otherwise ETH0 is ready for upgrading the connectivity to the cloud.

3G and Wi-Fi connectivity are not supported for Local View (ready for the upgrade to the cloud connectivity).

Commissioning is done by ABB Provisioning Tool and, during that phase, it requires internet connectivity.

Firmware update can be done by ABB Provisioning Tool cabled to ETH0 and laptop.

ABB Provisioning Tool is available <u>here</u>.



ABB Provisioning Tool



Abb Ability™ Energy and Asset Manager

# Main details in a nutshell

| Supported Devices   | <b>45 by Modbus TCP + 15 by Modbus RTU</b><br>Emax 2 Series Breaker, Tmax XT Breaker, New Emax series, Tmax T series, Ekip UP, TruOne,<br>Slimline XR Gold, TVOC2 (Arc Guard), CM-UFD, ITS2.1, Ekip Signalling TCP, CMS700, Insite Pro M, M4M,<br>M2M, EQ Meter, EQ Matic, SWICOM, MDC4-M, REF542+                                                                                                                                                                                                                                                                                                   |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Available Widgets   | Connectivity Overview, Device Current Trends, Device Power Data, Device Voltage Trends, Energy Cost,<br>Energy Data, Energy Monitoring, Group Peak Monitoring, Group Real time currents,<br>Group Real Time voltage, Group Real time Power, Power Demand, Power Factor, Power Generation,<br>Power Quality, Real-time Voltage, Real-time Current, Real-time Power, Arc-guard widget, Analog Data<br>Monitoring, Digital Data Monitoring, Asset Health overview (overall health condition of equipment),<br>Environmental Data, Temperature Trend, Asset list (table) showing the connectivity status |
| Available Functions | <ul> <li>Explore tab with list of assets (devices) with:</li> <li>Available detailed status of the asset</li> <li>Possibility to edit asset</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                     | <b>Data</b> analytics tab:<br>• Capability to create groups (also group of groups)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                     | Settings tab:<br>• Available plant setting<br>• Possibility to manage user<br>• Settings of billing parameter*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                     | <ul> <li>Events tab:</li> <li>List of events occured <ul> <li>Capability to create new alert condition</li> <li>The alerts available are: CB tripped, O/C, Any alarm, Any trips, Contact wear, Currents IL1-IL2-IL3-N,</li> <li>Voltages U1-U2-U3-U12-U23-U31, Power Factor, Total Active power, Total apparent power, Total reactive power and others only if present in the devices</li> </ul> </li> </ul>                                                                                                                                                                                         |

\*one tariff only

# Shopping list

The relative commercial codes are the following:

| Code                 | Description                                  |
|----------------------|----------------------------------------------|
| 1SDA115508R1         | ABB Ability Hybrid* Industrial gateway       |
| 1SDA115509R1         | ABB Ability Hybrid* Industrial gateway 3G EU |
| 1SDA115510R1         | ABB Ability Hybrid* Industrial gateway 3G US |
| *This is the factory | name                                         |

Additional accessories are the same of legacy gateway E-Hub 2.0.

| Code         | Description             |
|--------------|-------------------------|
| 1SDA114038R1 | I/O module              |
| 1SDA114039R1 | Wi-fi/Bluetooth antenna |
| 1SDA114040R1 | Cellular antenna        |
| 1SDA114041R1 | Wall Mounting brackets  |
| 1SDA114043R1 | Supply                  |

ABB switchgears can also be equipped with Edge Industrial Gateway. Please refer to your ABB contact person for further information.



During the promotion phase, the gateway code will include all the webserver features.

After it, the gateway will leverage on ABB Ability Marketplace™ to enable webserver features. These will be purchased as recurrent subscriptions or perpetual licenses.

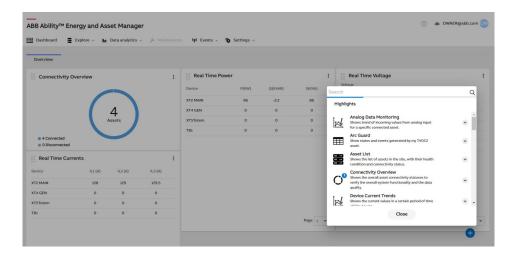
#### ABB Ability Marketplace<sup>™</sup> US

<u>https://us.marketplace.ability.abb/en-US/listing</u> ABB Ability Marketplace™ China <u>https://marketplace.ability.abb.com.cn/</u> ABB Ability Marketplace™ EU and Rest of the World <u>https://eu.marketplace.ability.abb/en-US/listing</u>

Firmware upgrade will also enable the cloud connectivity option.

# How ABB Ability<sup>TM</sup> Energy and Asset Manager looks like in Local View **Dashboard**

|                                                                |     |                  |                  |                 | 🗞 Settings 🤟 |         |        |                            |                         |                         |                       |
|----------------------------------------------------------------|-----|------------------|------------------|-----------------|--------------|---------|--------|----------------------------|-------------------------|-------------------------|-----------------------|
| Overview                                                       |     |                  |                  |                 |              |         |        |                            |                         |                         |                       |
| Connectivity Overview                                          |     |                  | :                | Real Time Por   | wer          |         | I      | Real Time Voltag           | e                       |                         |                       |
|                                                                |     |                  |                  | Device          | P(KW)        | Q(KVAR) | S(KVA) | Voltage<br>Phase-Phase V   |                         |                         |                       |
|                                                                |     |                  |                  | XT2 MAIN        | 86.1         | -2.3    | 86.1   | Device                     | U12 (V)                 | U23 (V)                 | U31 (V)               |
|                                                                | 4   | 4                |                  | XT4 GEN         | 0            | 0       | 0      | XT2 MAIN                   | 385.8                   | 385.4                   | 386.2                 |
|                                                                |     |                  |                  |                 |              |         |        |                            |                         |                         |                       |
|                                                                |     | sets             |                  | XT5Totem        | 0            | 0       | 0      | XT4.GEN                    | 384.1                   | 384.2                   | 384.9                 |
|                                                                |     |                  |                  | XTSTotem<br>TB1 | 0            | 0       | 0      | XT4 GEN                    | 384.1                   | 384.2                   | 384.9                 |
| 4 Connected     O Disconnected                                 |     |                  |                  |                 |              |         |        | XT4 GEN<br>XT5Totem<br>TB1 | 384.1<br>401.8<br>399.9 | 384.2<br>401.5<br>401.4 | 384.9<br>401.4<br>402 |
| 0 Disconnected                                                 |     |                  | 1                | TB1             |              |         |        | XT5Totem                   | 401.8                   | 401.5                   | 401.4                 |
| O Disconnected Real Time Currents                              | As  |                  | IL3 (A)          | TB1             |              |         |        | XT5Totem                   | 401.8                   | 401.5                   | 401.4                 |
| O Disconnected  Real Time Currents  evice IL1                  | As  | sets             |                  | TB1             |              |         |        | XT5Totem                   | 401.8                   | 401.5                   | 401.4                 |
| O Disconnected      Real Time Currents  evice  IL1  r2 MAIN  2 | As: | IL2 (A)          | IL3 (A)          | TB1             |              |         |        | XT5Totem                   | 401.8                   | 401.5                   | 401.4                 |
| III O Disconnected                                             | As: | IL2 (A)<br>128.9 | IL3 (A)<br>129.6 | TB1             |              |         |        | XT5Totem                   | 401.8                   | 401.5                   | 401.4                 |



### Explore

| ABB Abilit                | y™ Energy and | d Asset | Manager                     |                         |                  |      | 1 🔹 OWNER@abb.com 🎯 |  |  |
|---------------------------|---------------|---------|-----------------------------|-------------------------|------------------|------|---------------------|--|--|
| Dashboard                 | Explore -     | L Dat   | a analytics 🗸 🎾 Maintenance | 🕅 Events - 🏠 Settings - |                  |      |                     |  |  |
| Explore : All equipment C |               |         |                             |                         |                  |      |                     |  |  |
| NAME                      |               |         | CONNECTION                  | MODEL                   | SERIAL NUMBER    | Туре |                     |  |  |
|                           | XT2 MAIN      | :       | <b>⊋</b> Connected          | XT2 LSIG                | 11112019Totem    |      |                     |  |  |
|                           | XT4 GEN       | :       | ≓ Connected                 | ST4 EVO LSI             | 8GZ0023484315000 |      |                     |  |  |
|                           | XT5Totem      | :       | <b>⇔</b> Connected          | XT5 HI TOUCH            | 8PK0118484515010 |      |                     |  |  |
|                           | TB1           | :       | <b>≓</b> Connected          | XT7-123                 | 230920191030HG9P |      |                     |  |  |
|                           |               |         |                             |                         |                  |      |                     |  |  |
|                           |               |         |                             |                         |                  |      |                     |  |  |
|                           |               |         |                             |                         |                  |      |                     |  |  |

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