NOTE

Network and installation requirements:
1. Provide Gigabit Ethernet switch or a combination of switches, either via LAN or via additional routers with RJ45 ports.
2. Only during commissioning with Modbus TCP devices, it is necessary to connect the devices and Gigabit Ethernet switch on the same network (see included Ethernet cable).
3. In Ethernet connection in all networks, the following ports shall be reachable:
   -- 443/TCP, needed for the upload of the data via HTTPS
   -- 32768/TCP, needed for publish/subscribe
   -- 123/AUDP, if connecting to a public NTP server or ABB GTM server
4. Disable the firewall, if it is present on your laptop, before starting commissioning.
5. For commissioning, connect laptop to an Ethernet network used for field devices (Gigabit Ethernet). Laptop shall be able to connect to internet via LAN.

LEGEND

- Modbus RTU 5405
- Modbus TCP
- Ethernet
- ABB
- Ekip Signaling 10K
- Ekip Sig. TCP
- M2M
- EMAX 2
- TMAX XT
- Digital Signal
- E-HUB 2.0
- EMAX NEW
- MV REFXXX
- E-SC
- Clear
- Help
- Menü
- Close
- Open
- ABB Slim Line
- CM-UFD
- EKIP UP
- TMAX T
- ABB E-Hub 2.0
- SWITCH n RJ45 JACK
- TMAX XT
- ON LAN/LINK M-Bus Q/A/S 3.16.1
- ON LAN/LINK Modbus Q/A/S 4.16.1
- EQMATIC
- M4M
- SCU100
- REFXXX
ABB ABILITY EDCS REFERENCE ARCHITECTURE COLLECTION

NOTES
Reference architectures provide examples of ABB Ability EDCS systems, showing which devices is possible to connect to cloud platform. In real instalation the mix of products can differ from examples.

E-HUB / E-HUB2
In order to ensure optimal data logging performance:
- Verify the correct balance between Naster and Slave devices.
- Modbus TCP/IP Connectivity: the devices connected to each Ekip Com Hub / E-Hub with Modbus TCP communication protocol cannot exceed 15 points.
- Modbus RTU (RS-485) Connectivity: the slave devices connected to each Ekip Com Hub / E-HUB with Modbus RTU communication protocol cannot exceed 15 points.

(1) E-HUB is no longer available for sales, it has been replaced by E-HUB 2.0

<table>
<thead>
<tr>
<th>TABLE 1: MODBUS TCP</th>
<th>TABLE 2: MODBUS RTU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device</td>
<td>frames / sec</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>weight</td>
<td>5</td>
</tr>
</tbody>
</table>

Max 1 CMS700 + 96 sensors for both E-HUB and Com HUB
Max 1 SCU100 + 96 sensors for both E-HUB and Ekip Com HUB
Max 1 EQmatic® + 10 meters

*EQmatic compatible with ABB Ability EDCS as master of system with Modbus RTU and M-Bus systems, but only the 16 version (QA/S 3.16.1, M-Bus; QA/S 4.181, Modbus RTU)

E-HUB 2.0
In order to ensure optimal data logging performance:
- Verify the correct balance between Naster and Slave devices.
- Modbus TCP/IP Connectivity: the devices connected to each E-HUB 2.0 with Modbus TCP/IP communication protocol cannot exceed 30 points.
- Modbus RTU (RS-485) Connectivity: the devices connected to each E-HUB 2.0 with Modbus RTU communication protocol cannot exceed 30 points.

<table>
<thead>
<tr>
<th>TABLE 3: CMS700</th>
<th>TABLE 4: SCU100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device</td>
<td>frames / sec</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>weight</td>
<td>5</td>
</tr>
</tbody>
</table>

CMS700 + 32 sensors: 3 points and / or CMS700 + 96 sensors: 5 points
SCU100 + 32 sensors: 3 points and / or SCU100 + 96 sensors: 5 points
Max 2 EQmatic® + 15 meters

*EQmatic compatible with ABB Ability EDCS as master of Modbus RTU and M-Bus systems, but only the 16 version (QA/S 3.16.1, M-Bus; QA/S 4.181, Modbus RTU)