Enapter Service Bulletin #2

23/10/2020

About this document

The Service Bulletin will periodically summarise new features and developments of our products, as well as publish up-to-date recommendations to achieve the highest levels of operational performance and safety using our hydrogen generation systems and EMS.

1. Hardware Updates for the EL 2.1

As part of our continuous improvement process, we have updated the placement of certain ports on the EL 2.1 front panel. All new EL 2.1 Electrolysers will now incorporate the following modifications, which will simplify integration:

- The port marked "Electrolyte", previously used for filling electrolyte, has been merged with the port marked "Drain". Filling as well as draining of the electrolyte are now possible via the same port.
- The port for hydrogen "Purge" has been offset slightly to the right. The relocation of the outlet allows for easier integration into smaller cabinets and will help distinguish the purge from the hydrogen outlet, and hence avoid any mix-ups during integration.
- The USB port, previously accessible to Enapter service teams only, has now been removed.
- Dry contact socket which was once called Safety is now rotated 180°; that means the main contact is on the bottom and the repeater is on top.

The newly updated EL2.1 will be distinguishable from the previous version by the specifier "Rev. A" on all documentation. Updated documentation regarding the new revision of the EL 2.1 is available on the handbook via these links:

- [Manual](#)
- [Battery Limits](#)
- CAD models (available for download [here](#))

Action needed: The modifications are fully compatible with the previous design of the EL 2.1; simply familiarize yourself with the updated positioning of ports. No other actions are required on the part of the integrator.

2. New product introduction: Dryer DRY 2.1

We are introducing the new Dryer DRY 2.1, now capable of processing up to 2.5 Nm³/h of hydrogen, corresponding to 5 EL 2.1 modules (35 Barg standard version). We have improved the efficiency of the dryer, reducing the power requirement by 175 W compared to the previous DRY 2.0 DM2030. The DRY 2.1 has been CE-certified and is available at the same price as the DRY 2.0 DM2030.

Documentation for the new DRY 2.1 is available here:

- [Datasheet](#)
- [Manual](#)
- [Battery Limits](#)
- CAD Models (available for download [here](#))

Action needed: You can begin ordering the Dryer DRY 2.1; it is fully compatible with the EL 2.0, EL 2.1 and Dryer 2.0; existing installations can be upgraded with minimal changes to the piping.

3. Firmware update 1.2.1. with Safety Heartbeat

The new firmware update introduces the Safety Heartbeat functionality. A periodic signal is generated by the Gateway and sent to the EL 2.1, in order to continue to be able to control the device remotely via the Mobile App or Enapter cloud. If the electrolyser does not receive this signal from the gateway within a specified time period, it will undergo a normal shutdown. This allows the user to ensure that the electrolyser only operates whilst a stable connection to the Mobile App or Enapter Cloud is available. This feature is optional.

For further information on Safety Heartbeat follow this [link](#) to the Handbook. Information about the Firmware version 1.2.1 is available [here](#).

Action needed: The update is now available in the Enapter Mobile Application. To update your device, navigate to **Device Info -> Firmware** and press the **Check for Updates** button.

To activate Safety Heartbeat via Gateway:

1. Connect to the Gateway - [Link](#)
2. Configure Safety Heartbeat on the Gateway - [Link](#)

To activate Safety Heartbeat via Modbus, follow the instructions [here](#).

All questions regarding the software update can be directed to: support@enapter.com.