1 Product Description

This supplementary sheet is aimed to users who need to replace a HIQuad central module.

The HIQuad operating system is actually stored in a central module's flash EPROM. The central module is delivered with the latest state of the operating system. In certain situations, it may be necessary to replace the existing operation system with an older version, e.g. when replacing a defective central module.

If is not possible to load a released operating system before V7. 0-8 (07.30) into the central modules, then the utility *HIMA standalone loader* is needed. This has to be loaded before downloading the operating system via the dialog *operating system download,* see chapter 1.1. and 1.2.

The *HIMA standalone loader* (07.30) is located on the HIMA DVD or can be downloaded from the HIMA website.

i HIMA recommends loading the operating system per download, such as specified in chapter 1.1 and 1.2. For more details, refer to chapter *Loading the Operating System* in operating system manual HI 800 105 E.

Because of the many details that must be taken into account, the operating system replacement during PES operation should only be performed by HIMA service personnel or experienced users!

1.1 Up- and Downgrade the operating system via Ethernet (TCP/IP)

The described procedure refers to the connection of the PADT via Ethernet (TCP/IP) to the central module CU1. When replacing CU2, the procedure is basically the same, except that CU2 must be selected and CU1 must be deselected in the *Operating system download* dialog box.

The downgrade via Ethernet is valid to the following operating systems:

- BS41q/51q V7.0-8 (05.34)
- BS41q/51q V7.0-8 (06.04)
- BS41q/51q V7.0-8 (06.05)
- BS41q/51q V7.0-8 (07.14)

i The PADT may only be connected via Ethernet, if the used resource ID is identical to the ID previously set (DIP switches on the central module, switches 1...5).

Load the *HIMA standalone loader* and the *operating system* into central module via Ethernet.

Downgrade the central module 1:

1. Erase user program of the central module 1, refer to operating system manual HI 800 105 E.
2. To load the HIMA standalone loader:
   - Open the control panel and select **OS-Download**.
   - In the *Operating system download* dialog box,
     set the checkmark **Download** in the transfer field of central module 1,
     remove the checkmark **Download** in the transfer field of central module 2.

- Select the *HIMA standalone loader* and perform *operating system download* of the first central module, duration < 3 min.

3. To load the operating system:
   - Open the control panel (if closed) and select **OS-Download**.
   - In the *Operating system download* dialog box,
     set the checkmark **Download** in the transfer field of central module 1,
     remove the checkmark **Download** in the transfer field of central module 2.
   - Select the operating system and perform *operating system download* of the first central module, duration < 3 min.
4. Check the code version of the operating system in the diagnostic display.
5. Perform the user program download:
   - Select *Download/Reload* and transfer the user program to the central module 1 with **Download**.

1.2 Up- and Downgrade the operating system via RS485

The described procedure refers to the connection of the PADT via RS485 for all operating systems from BS41q/51q V7.0-7 (98.35) on. When replacing CU2, the procedure is basically the same, except that CU2 must be selected and CU1 must be deselected in the *Operating system download* dialog box.

i The baud rate of the PADT bus and the baud rate of the central module must be set identical. No F8621(A)/25/26/27/28 communication modules may be inserted at the concerned central module while loading an operating system.

Load the *HIMA standalone loader* and the *operating system* into central module via RS485.

Downgrade the central module 1:

1. Erase user program of the central module 1, refer to operating system manual HI 800 105 E.
2. Remove the first central module.
3. **Remove** all F8621(A)/25/26/27/28 located near the first central module.
4. Insert the first central module.
5. Open the Control Panel.
6. To load the HIMA standalone loader:
   - Insert the PADT bus cable into the first central module and screw it tightly.
   - Remove the PADT bus cable from the second central module to prevent any unintentional load.
   - Select the *HIMA standalone loader* and perform *operating system download* of the first central module, duration approx. 20 min with 57600 baud.
7. To load the operating system:
   - Select the operating system and perform *operating system download* of the first central module, duration approx. 20 min with 57600 baud.
8. Remove the first central module.
9. **Insert** all F8621(A)/25/26/27/28 back to their slots near the first central module.
10. Insert the first central module.
11. Check the code version of the operating system in the diagnostic display.
12. Perform the user program download:
    - Select *Download/Reload* and transfer the user program to the central module 1 with **Download**.
13. Insert the PADT bus cable into the second central module and screw it tightly.