

Appendix G Hardware Installation

RTA Board PU515A

To install the PU515A:

1. Disconnect the computer power cord from the power line.



Remove the computer power cord from the power line before removing the cover. There are unisolated and potentially fatal power line voltages present under the cover.

2. Remove the computer cover. Refer to the computer hardware manual for details.



Wear a properly grounded antistatic wrist strap and handle the PU515A with care. Static discharges may damage the PU515A when it is removed from the antistatic bag. Do not touch connectors with bare hands.

3. Unpack the PU515A.
4. Detach the plastic handle from the PU515A, if required.
5. Remove the cover plate of any PCI slot and mount the PU515A in the slot.
6. Install the computer cover. Refer to the computer hardware manual for details.
7. Connect the computer power cord into the power line.
8. Turn on the computer.

RTA Unit PU410

The RTA Unit PU410 is a standalone hardware unit which supports both single and dual point to point connection with the connectivity server node through Ethernet. Single or redundant connection with MasterBus 300 is enabled through RJ-45 connectors.

Redundant connectivity server pair supports the combination of connectivity server node with RTA Board PU515A and with RTA Unit PU410.

Once the installation has been completed, the term RTA Board is used in Plant Explorer, dialogs and system status independent of whether the RTA hardware is PU410 or PU515A.

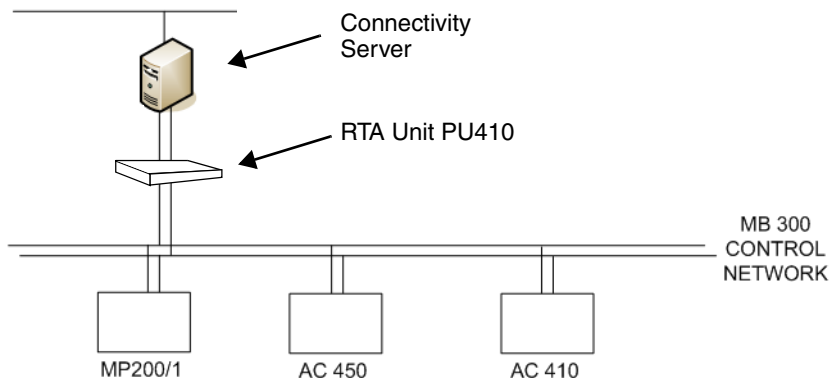


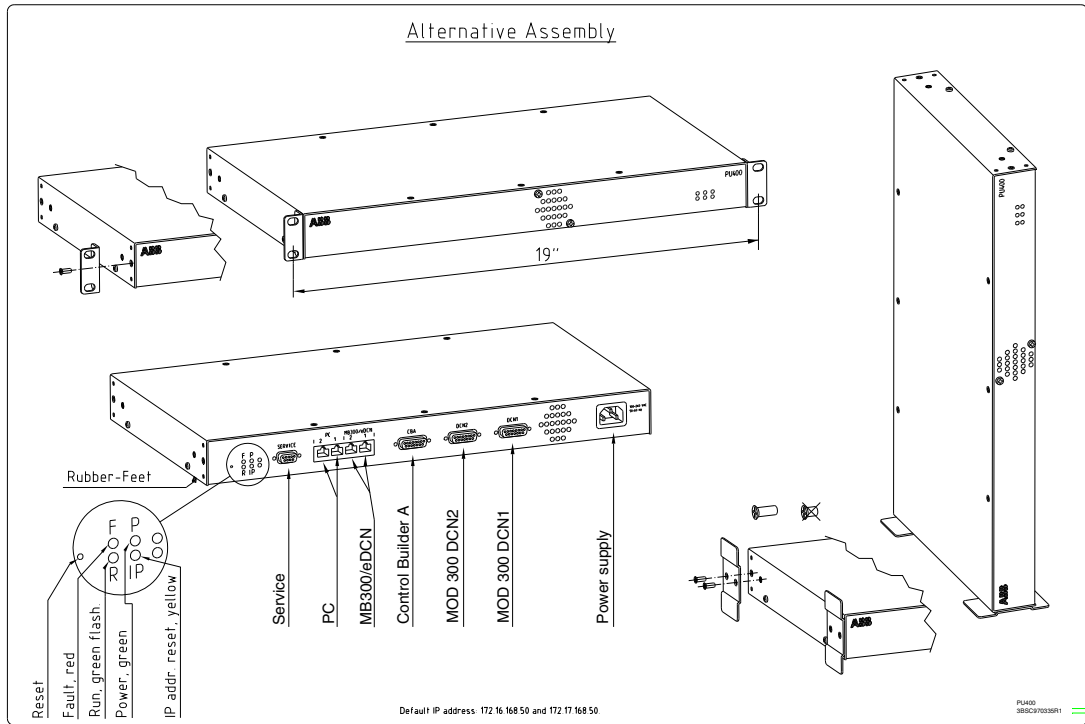
Figure 93. Overview - Typical Installation

PU410 Specification

- Connectors:
 - Two shielded RJ-45 connectors for 100Mbit/s full duplex communication with the PC (Connectivity Server), PC 1 and 2 ports.
 - Two shielded RJ-45 connectors for 10Mbit/s half duplex communication with MasterBus 300/300E or eDCN control network, MB300/eDCN 1 and 2 ports.
 - Two 15-pos Dsub socket connectors for DCN communication, DCN1 and DCN2 ports. (Not used for PU410)
 - One 15-pos Dsub socket connector for RS232 and RS422 communication with Control Builder A and CBA port. (Not used in 800xA for Advant Master connectivity server)
 - One 9-pos Dsub socket connector for RS232 communication for debug and upgrading of firmware, SERVICE port.

- Power:
100-230Vac 50-60Hz
- Power Consumption: Typical 12W without I/O connected, maximum 25W
- Size:
HxWxD (mm): 45 x 443 x 243
- Net weight: 3.2 kg

The informative label is attached underneath the unit.



In case of rack assembly, place the PU410 Unit so that the connectors and the reset button are within reach.

i Before returning the PU410 Unit for replacement or repair, always remove accessories such as brackets and cables.

Figure 94 shows the rear and front view of PU410.

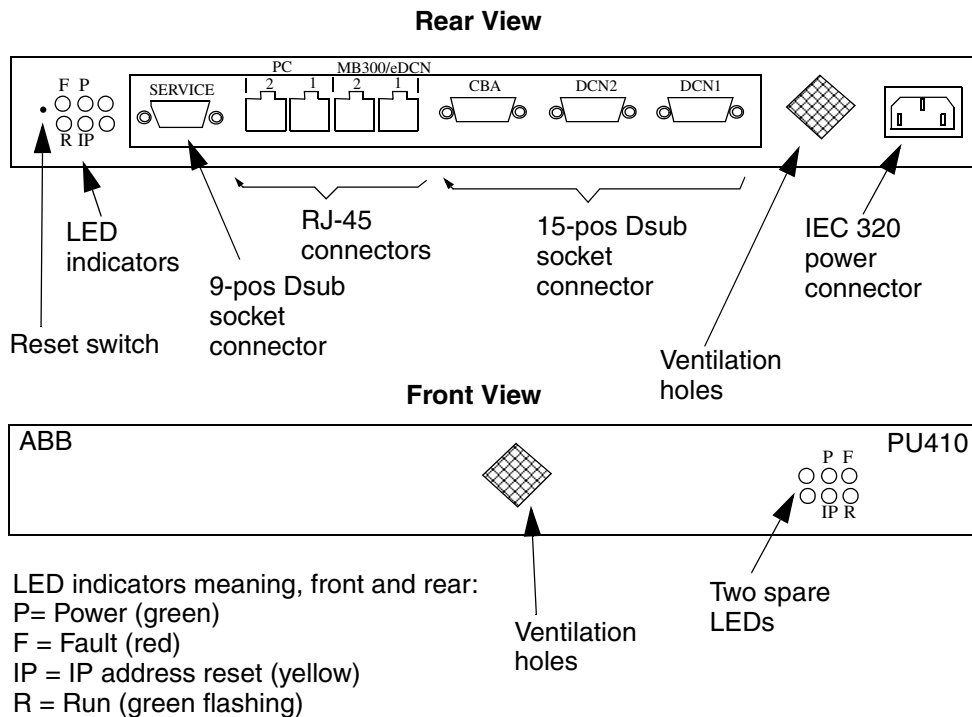


Figure 94. The PU410 External RTA Unit, Front and Rear View

Since the PU410 unit includes a supervised fan, it is recommended to check the fan and vacuum clean the unit from time to time.

i If a fan problem is detected, the red fault LED will be illuminated and the unit will shut down. The 800xA for Advant Master connectivity server will try to restart the unit. The red fault LED will still be illuminated until the unit is reset, even if the fan problem disappears.



The red fault LED can illuminate for other problems as well.



The red fault LED will also illuminate for a few seconds at PU410 start-up.

Mechanical Installation

The PU410K01 kit includes brackets for 19" rack mount and for floor or desktop mounting.

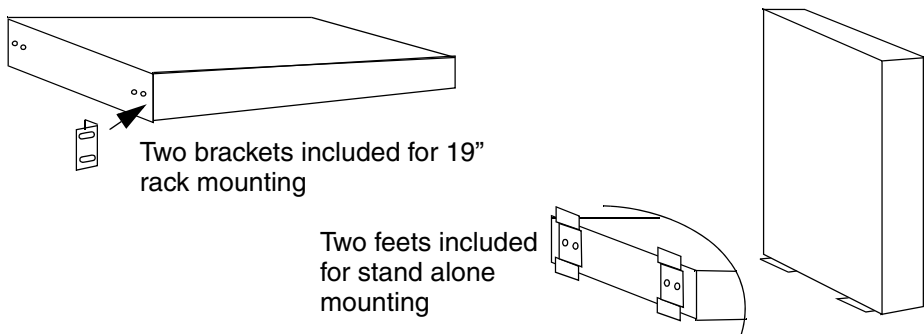


Figure 95. Brackets for PU410 Installation in 19" Rack or Stand Alone

Connection To Connectivity Server

The PU410 unit has two ports called PC 1 and 2 for connection to the connectivity server. Only one port is necessary for the communication but if redundancy is wanted both ports can be used.

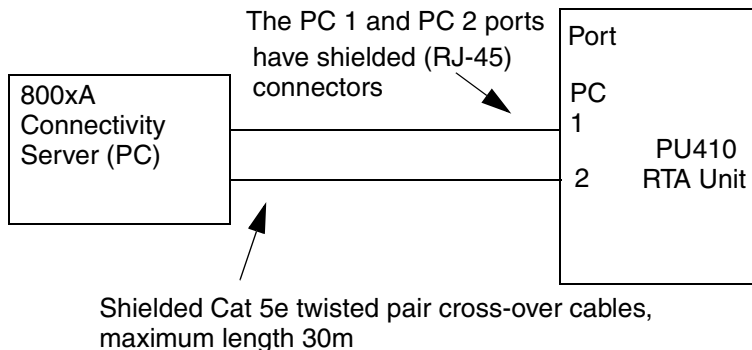


Figure 96. Connecting PU410 to Connectivity Server

- Always use shielded Cat 5e (or better) twisted pair cross-over cables to reduce electric noise disturbances. The maximum cable length is 30m but keep cable length as short as possible.
- The default IP addresses of PU410 are for the PC 1 port 172.16.168.50 and for the PC 2 port 172.17.168.50.