

OP7000 Adding or Replacing Boards

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OPAL-RT strongly recommends the use of anti-static wrist straps whenever handling any electronic device provided by OPAL-RT. Damage resulting from electrostatic charges is not covered by the manufacturer's warranty.

Depending on your needs, you may wish to install additional conditioning or FPGA boards in the OP7000 simulator. The front of the simulator contains designated slots for a total of 8 additional boards (the center slot is reserved for the main FPGA board).

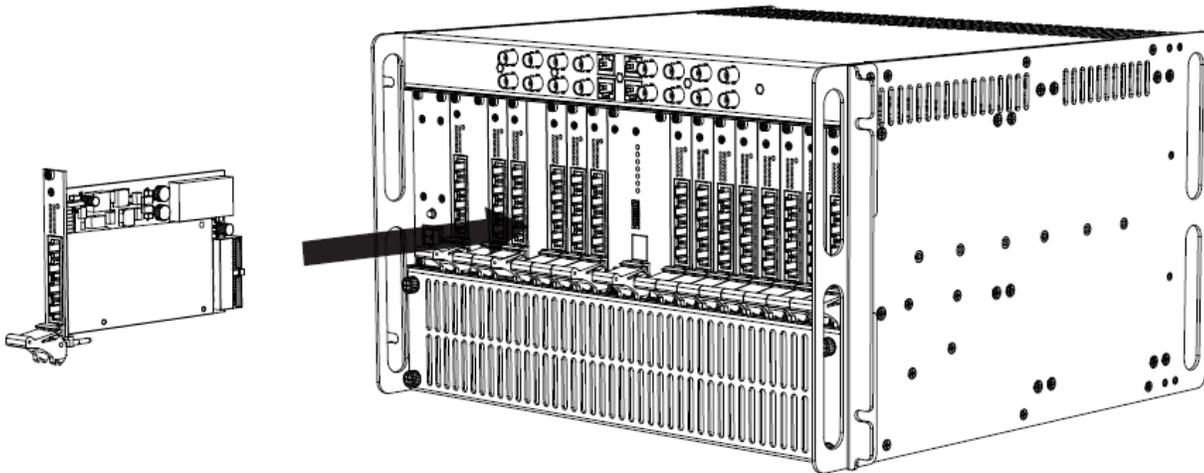
Slots are color-coded to indicate the type of board to be installed in the front:

Yellow	Odd-numbered slots can accept OP7220 carrier boards, OP7353 digital monitoring board and FPGA boards (maximum 8 boards). When these slots are used, the next (even-numbered) slot on the right cannot be used.
Black	Even-numbered slots. Only OP7353 digital monitoring boards can be installed (maximum 8 boards).

Installing a New Board

- Disconnect simulator power
- Remove the blank plate from desired
- Insert desired mezzanine board on carrier board (optional, see [changing mezzanines](#)).
- Gently slide the new board into the slot until the locking tab clicks into place and connector slides snugly into the connector on the midplane.
- Reconnect power

The following image illustrates how to insert hardware components into the OP7000 chassis.



The system must be powered down before changing boards. Failure to do so may damage the equipment.

Changing Mezzanines

The OP7220 is the carrier board on which the mezzanine conditioning boards are installed. Installation is simple and once the conditioning board is firmly pressed into place, the carrier board is ready to be installed in the OP7000.

Two polarized connectors fasten the module and four screws affix it for a more secure connection to the carrier. Make sure that the connectors are properly aligned; they should fit together easily. Use light pressure to push the mezzanine board into the carrier board.

Front and rear board connections

Special attention must be paid to the types of boards that are installed in each of the slots at the front and the rear of the unit. If an analog board is installed in slot 1 at the front of the unit, then an analog conditioning board **MUST** be installed in slot 1 at the rear of the unit.

Each slot has a track that guides the board into the exact alignment for the connector

