

Keysight Y1214A Air Inlet Module Kit Installation Guide

Keysight's M9018A 18-Slot PXIe chassis cooling design uses auto-speed fans to extract hot air from the chassis rather than push cool air into the chassis. This design provides better cooling efficiency in the chassis and no air filters are required. The Y1214A Air Inlet Module Kit provides additional cooling from the front of the chassis. The kit can provide additional cooling of high power dissipation modules.

The kit provides one 3-slot Air Blocker, two 1-slot Air Inlet Modules, two M3 Phillips screws.

Note: All slots in the PXI chassis must be populated with either a PXI module, covered with a filler panel, or have an Air Inlet Module installed to ensure proper air flow and module cooling.

General Use Recommendations

The kit is recommended when the M9018A chassis is rack mounted or when the bottom chassis vents are blocked and when:

- Systems with application modules that have high power dissipation or high component density and chassis slots that are not used.
- Systems run at a higher ambient temperature.

Other recommendations:

- When the chassis is rack mounted, 1-slot Air Inlet Modules should be installed in slots 9 and 10 and the 3-slot Air Blocker Module should be installed in the embedded controller space, next to the M9021A Cable Interface Module.
- Air Inlet Modules should be installed adjacent to PXI modules and populate the chassis starting from the middle slots and progressing toward either end.
- When rack mounting the chassis, never block the cooling vents on the sides of the chassis.
- For best cooling, place the 1-slot Air Inlet Modules adjacent to high-power modules such as digitizers, modules with high component count that restrict air flow, etc.

Installation and Removal

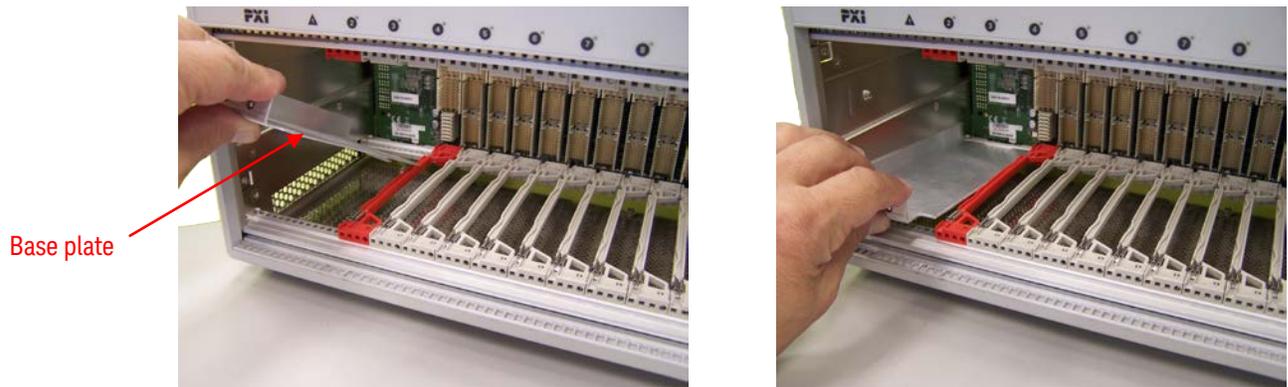
Installation of the Air Inlet Modules is similar to installing any other PXI module (note that the 3-slot Air Inlet module does not have the injector/ejector latch).

1. Make sure the PXI chassis power is turned off.
2. Holding the 1-slot Air Inlet Modules by the injector/ejector handle, slide it into the appropriate chassis slot.
 - a. Install the module into the PXI slot of the chassis by placing the module card edges into the front module guides (top and bottom).
 - b. Slide the module completely into the chassis.
3. Secure the front panel of the 1-slot Air Inlet Modules to the chassis using the module mounting screws. Performance may suffer if the screws are not securely tightened.
4. To install the 3-slot Air Blocker:
 - a. Remove slot covers over the three slots just to the left of the M9021A Cable Interface Module.
 - b. Note that the 3-slot Air Blocker consists of a base plate, a front plate, and two M3 Phillips screws. Install the base plate in the chassis before you attach the face plate.

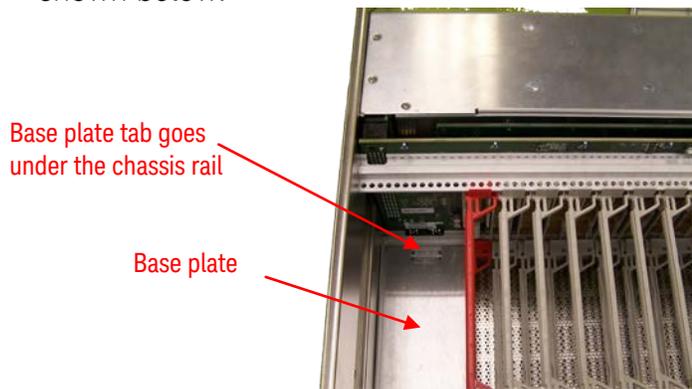


In the following photographs, chassis covers and all modules were removed for clarity. You do not need to remove modules or chassis covers to install the 3-slot Air Blocker.

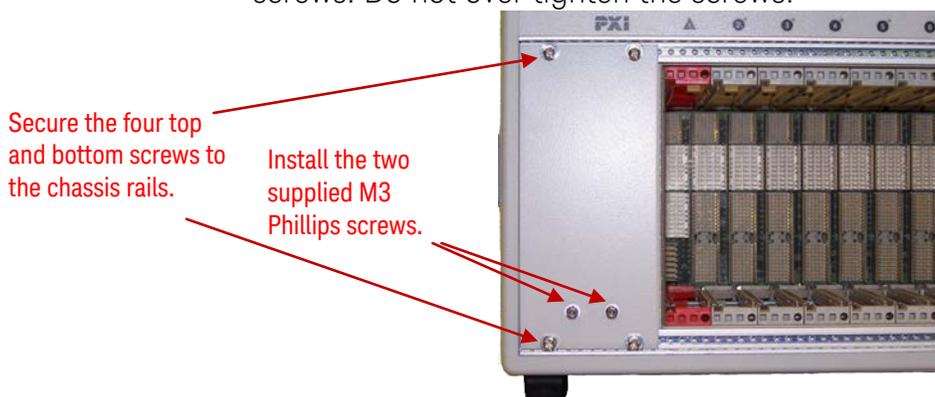
- c. Position the base plate as shown in the following photographs. Note that the bent tab goes toward the back of the chassis.



- d. The tab on the base plate must go under the rear extruded aluminum chassis rail as shown below.



- e. Install the face plate. Secure the face plate to the base plate with the two M3 Phillips screws. Secure the face plate to the chassis by the four module mounting screws. Do not over tighten the screws.



- 5. Plug in and power up the PXI chassis. Verify that the chassis fans are operating and free of airflow obstructions.

Note: Install all chassis covers, filler panels, and Air Inlet Modules after installing the other PXI modules.

CAUTION

Missing filler panels may disrupt necessary chassis air circulation.

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