

Keysight Y1271A Rack Kit Installation Note

This installation note contains procedures for installing the Y1271A Rack Kit for the Keysight M9010A 10-slot PXIe Chassis in a Keysight rack.

NOTE

This kit is designed for Keysight racks and requires using the Keysight Y1271A Rack Mount Rail Kit. The rear brackets may not fit a non-Keysight rack. Installation of the Y1271A Rack Kits on a non-Keysight rack requires using the E3664AC Rack Mount Rail Kit.

This rack mount kit allows you to mount the Keysight M9010A PXIe chassis flush with the front of the rack or to recess it up to 140 mm (5.5 inches) in 20 mm steps. Recessing the chassis allows for better cable management.

General Rack Mounting Guidelines

In rack mounting the chassis, follow these guidelines:

- The heaviest instrument or chassis should always be mounted at the bottom of the rack. Always begin installing heavy instruments at the bottom of the rack and work up. This maintains a lower center of gravity and reduces the possibility of the rack tipping.
- Anti-tipping feet, if available with the rack, should always be extended.
- For maximum cooling and optimum rack thermal efficiency, place the instrument or chassis with the greatest power consumption towards the top of the rack. This promotes efficient cooling since heat rises. When placed nearer to the top of the rack, high power instruments will not unnecessarily heat other instruments. However, in doing this, do not violate the guideline that the heaviest instruments should be placed at the bottom of the rack.
- If instruments or modules in the chassis are consuming maximum power, 1U of rack space is required for ventilation above the chassis.

NOTE

If instruments or modules in the chassis are consuming maximum power, a minimum of 1U or rack space is required for ventilation above the chassis.






NOTE

You may find installation of the rack mount kits easiest if you remove the side panels from the rack.

Figures 1, 2, and 3 show the M9010A PXIe chassis mounted in the rack kit and installed in a chassis. Note that, for clarity, the rack sides, front, and back are not shown.

The parts included with the Y1271A are listed in the following table (note that not all parts listed are available as field-replaceable parts).

Y1271A Rack Mount Kit

Part Number	Description	Quantity	
M9010-00200	Front Bracket, LEFT	1	See Figure 4
M9010-00201	Front Bracket, RIGHT	1	See Figure 4
M9018-21101	Front Handle	2	See Figure 4
M9010-00202	Rear Bracket	2	See Figure 9
M9010-00203	Bracket, Rear Standard	2	See Figure 9
M9010-09301	Brush Strip	2	See Figure 5
M9010-01202	Holder Plate	2	See Figure 5
0590-0804	Sheet metal Channel Nuts, 10-32 x 0.5	12	
0515-0386	M5 x 0.8 x 10 mm Pan Head T25 Torx Screws W/Washer (for mounting rear frame bracket to the rear bracket)	4	
3030-1768	10-32 Pan Head Dress Screws for Rack Flanges (painted to match the brackets)	8	
0515-5828	M4 x 0.7 x 10mm Phillips Flat Head Screws w Patch Lock (8 on brackets, 4 on handle)	12	
0515-6225	Screw Countersunk-HD Hex M3 X 0.5-THD 8.29mm-LG Alloy Steel 12.9Alloy Steel 12.9	4	

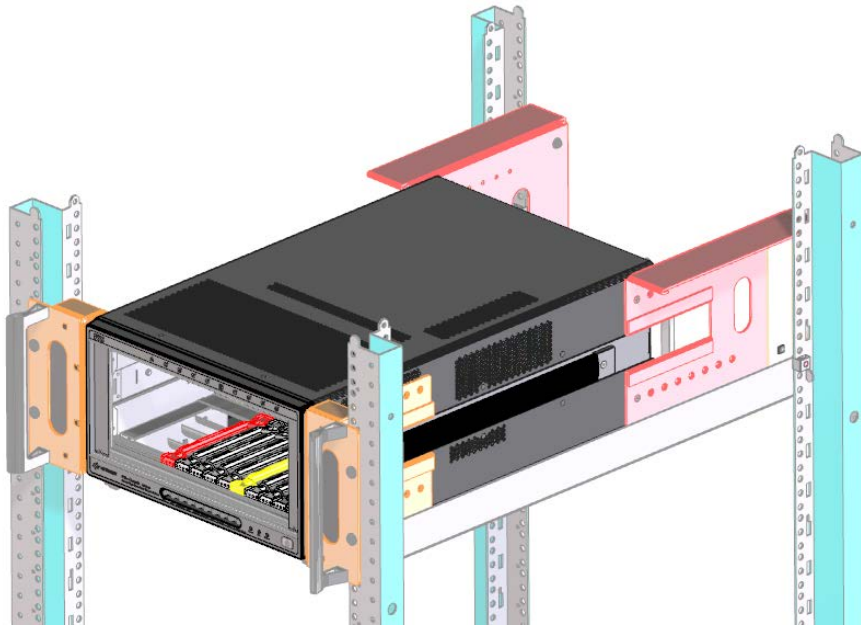


Figure 1 Example of Final Installation (Flush Mount, Front View)

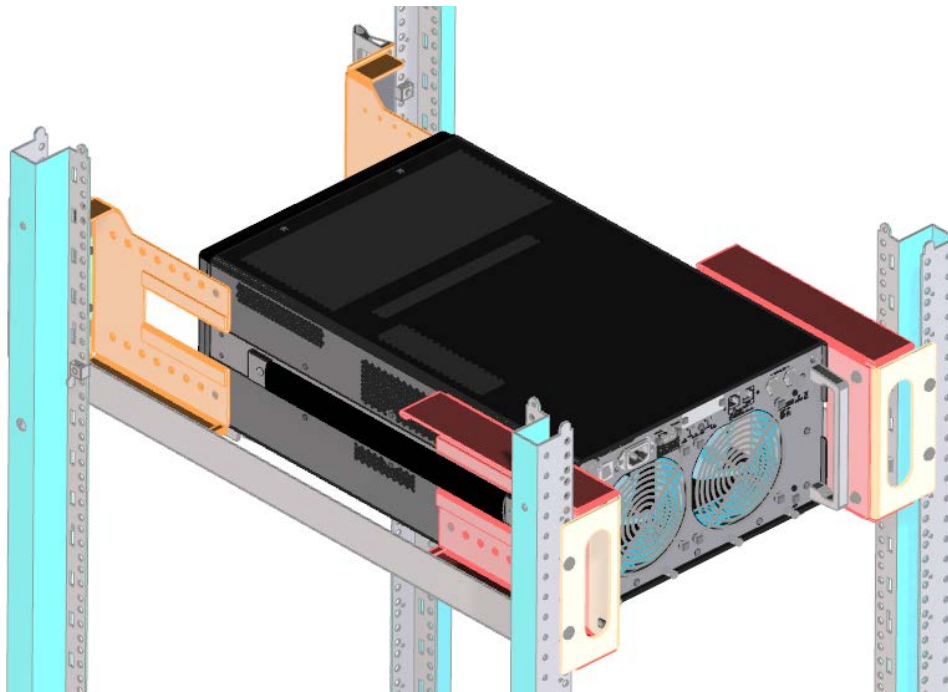


Figure 2 Example of Final Installation (Recessed Mount, Rear View)

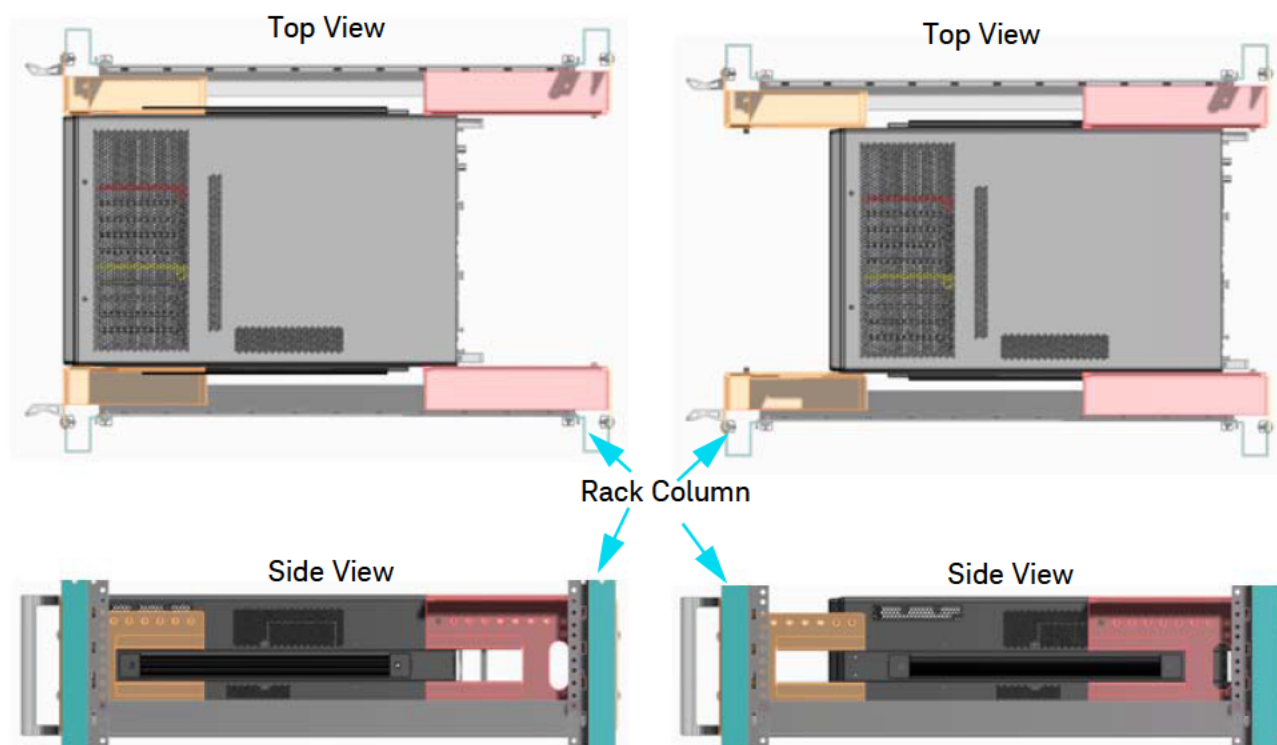


Figure 3 Y1271A Rack Kit shown with M9010A PXle Chassis – Flush and Recessed Installation

Tools Required for Installation

#1 and #2 Phillips screwdriver, T25 Torx driver, T8 Torx Driver

Assembly and Installation

- 1 Assemble Front Handle (M9018-21101) to Left and Right Front Brackets (M9010-00200, M9010-00201). Use two 0515-5828 (M4x10) screws to attach each handle to each bracket. See Figure 4 below.

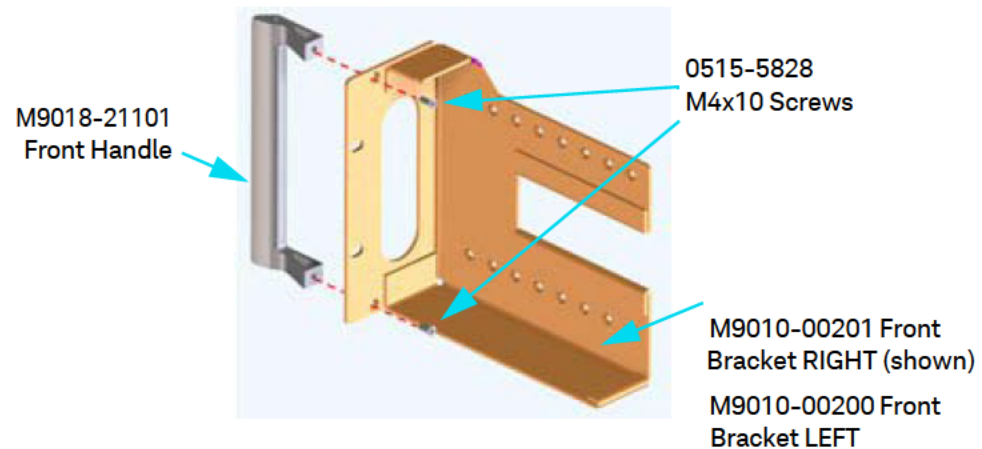


Figure 4 Install Handles to Front Brackets (Right bracket shown)

- 2 Assembly Brush Strip (M9010-09301) to Left and Right Front Brackets (M9010-00200, M9010-00201). Use two 0515-6225 (M3X8) Screws and Holder Plate (M9010-01202) to attach each Brush Strip to each bracket. See Figure 5 below.

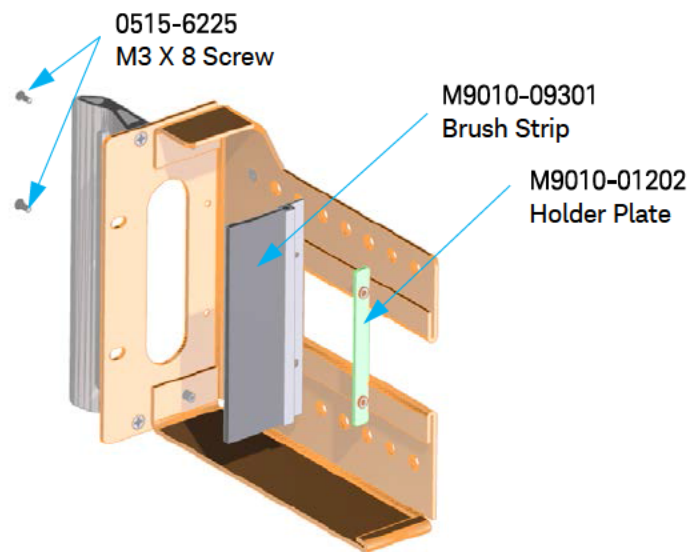


Figure 5 Install Brush Strip to Front Brackets (Right Bracket Shown)

- 3** Assemble Right and Left Front Brackets and Rear Brackets to the chassis. Use two 0515-5828 M4x10 screws per bracket. Use the front mounting holes (as shown in Figure 6) to flush-mount the chassis to the front of the rack. Match the holes in the front and rear brackets for the desired depth of installation. See Figure 6.

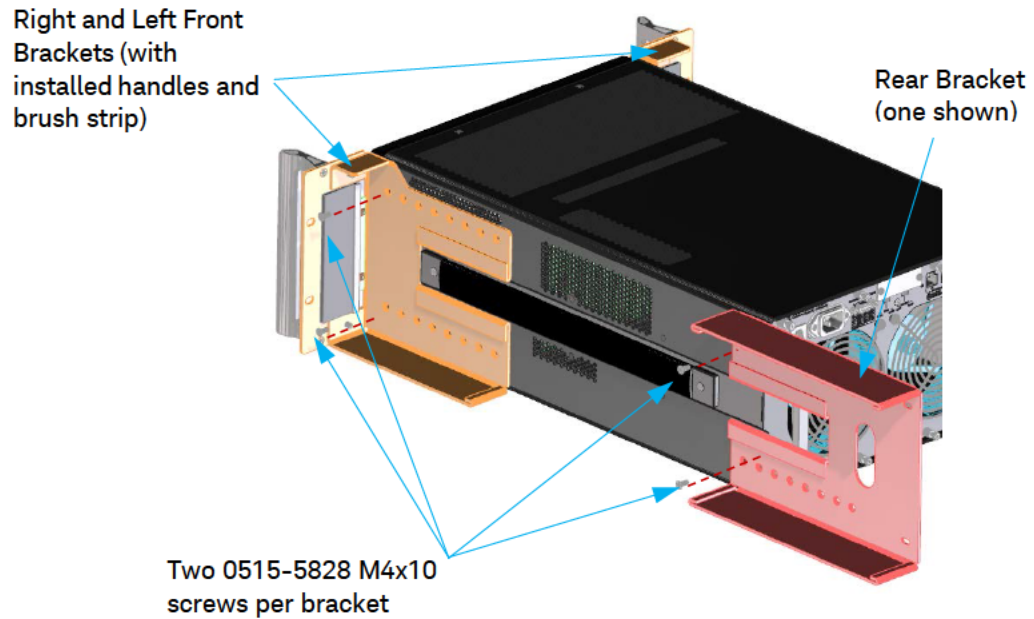


Figure 6 Attach Front and Rear Brackets to Chassis

- 4 Attach four 0590-0804 sheet metal channel nuts (two on each side for the Front Brackets) onto the backside of the front rack column. See Figure 7.
- 5 Attach rails onto rack columns. Use two 0590-0804 sheet metal channel nuts and 2680-0278 Machine Screws with washer T25 1-32 on each rail. See Figure 7.

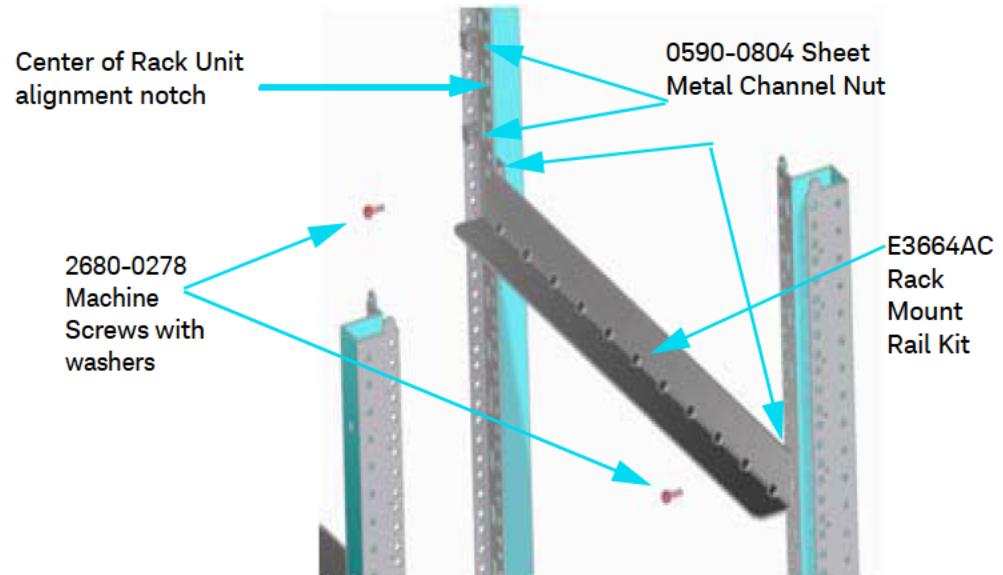


Figure 7 Install Sheet Metal Channel Nuts for Front Brackets and Rails to Rack

- 6 Slide the chassis into rack cabinet from the front side. Set the chassis on the rack rails.
- 7 Attach the Front Brackets to the Sheet Metal Channel Nuts installed in Step 4. Use 3030-1768 Dress Screws (10-32).

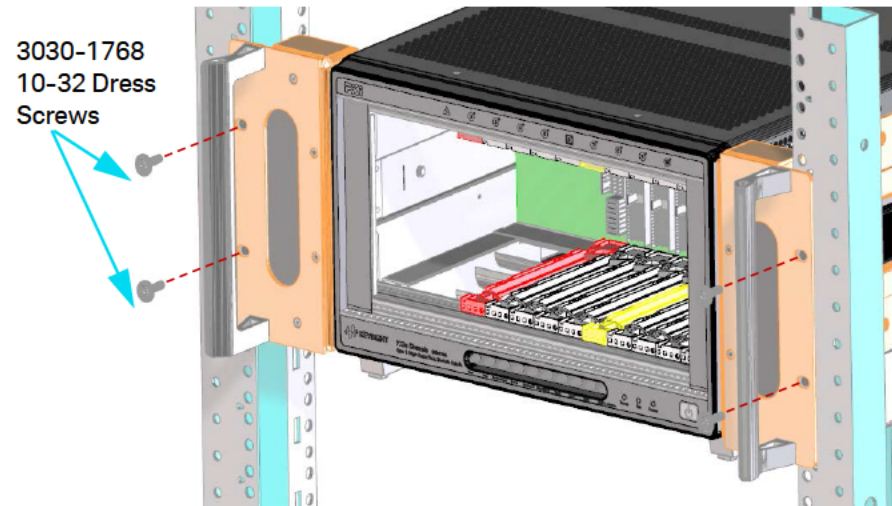


Figure 8 Fasten Front Brackets with Dress Screws

- 8** Identify where the Rear Bracket Standards connect to the rack. Install two sheet metal channel nuts (0590-0804) on each side of the rack. Use 10-32 Dress Screws (3030-1768) to connect each Standard to the rack. Refer to Figure 9.
- 9** Assemble the left and right Rear Bracket Standards to the left and right Rear Bracket. Use two 0515-0386 M5x10 screws per bracket. Refer to Figure 9.

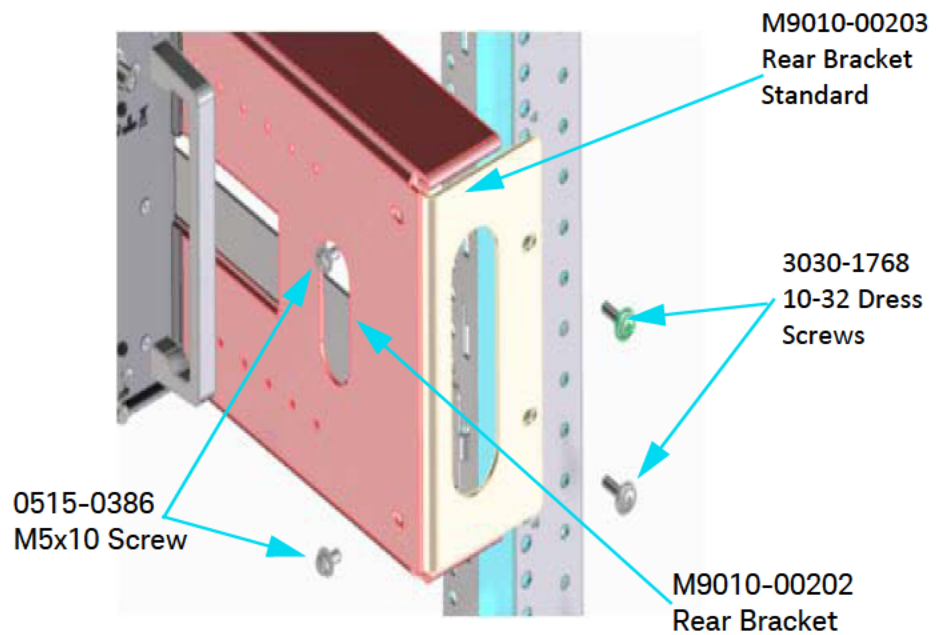


Figure 9 Attach Rear Bracket Standard to Rear Bracket and Rack Column

- 10** Attach 10-32 Dress Screws (3030-1768) through the Rear Brackets, through the rack column and into the sheet metal channel nuts. Refer to Figure 9.



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