

Known Difference Between VPX4812A/VPX4814A and Retired VPX4812/VPX4814

The VPX4812A and VPX4814A are designed to be functionally equivalent to the VPX4812 and VPX4814. The main difference between the new models and the old models is the power scheme. The old models required all three VPX backplane voltage rails VS1 (12V), VS2 (3.3V), and VS3 (5V). The new models are aligned with the latest power distribution recommendations from VITA 65.0-2019 which states that Plug-In Modules should only use VS1 (12V), 3.3V_AUX, and VBAT as power inputs from the backplane and derive all other voltage rails from that.

VPX4812A/VPX4814A

Power

No XMC Card Installed:

+12V (VS1):	0.4A typ. 1.0A max.
+3.3V (VS2):	Unused
+5V (VS3):	Unused

XMC Card Installed¹:

+12V (VS1):	20A max. ²
+3.3V (VS2):	Unused
+5V (VS3):	Unused
VPWR (12V):	8A ³
VPWR (5V):	8A ³

Note 1: The power supplied to the XMC card can be toggled between 5V or 12V depending on the card's requirements.

Note 2: The current carrying capacity of the VPX connector interface is the limiting factor for power delivery.

Note 3: The limiting factor is the current carrying capacity of the XMC connectors. With 8 VPWR pins rated @1A per pin, the maximum current draw capability is 8A.

VPX4812/VPX4814

Power

No XMC Card Installed:

+12V (VS1):	0W
+3.3V (VS2):	<1W
+5V (VS3):	2.62W typ. 5.43W max.

XMC Card Installed:

+12V (VS1):	0W max (VPWR = 5V) 60W max (VPWR = 12V)
+3.3V (VS2):	<1W
+5V (VS3):	80.43W max (VPWR = 5V) 5.43W max (VPWR = 12V)

Note: The power supplied to the XMC card can be toggled between 5V or 12V depending on the card's requirements and/or the power supply's available capacities.