

## VPX6VR180



### VPX6VR180 KEY FEATURES

- 6U vertical-mount chassis platform for 3U Open-VPX / SOSA aligned cards
- Supports RTMs for rear I/O
- Up to 16 slots OpenVPX slots (3U) at 1.0" pitch
- Card guides can be adjusted in .2" increments to accept various slot pitches
- Front-to-rear cooled with powerful dual hot-swappable blowers: RiCool 3+ @ 191 CFM/ea
- Fixed or pluggable PSU solutions (or both with switch between the two)
- Redundant power supply options
- Low cost design
- Optional rubber "feet" for desktop applications
- VITA 67 for RF and/or VITA 66 for optical options, designs for SOSA
- Customization available

The VPX6VR180 is a 6U vertical-mount chassis that holds up to sixteen 3U slots at a 1.0" pitch. It features powerful reverse impeller RiCool blowers that reside directly above the card cage. The blowers provide up to 382 CFM in the chassis, pulling air from the front bottom of the enclosure and blowing the exhaust 90 degrees out the rear of the enclosure for a very efficient cooling configuration.

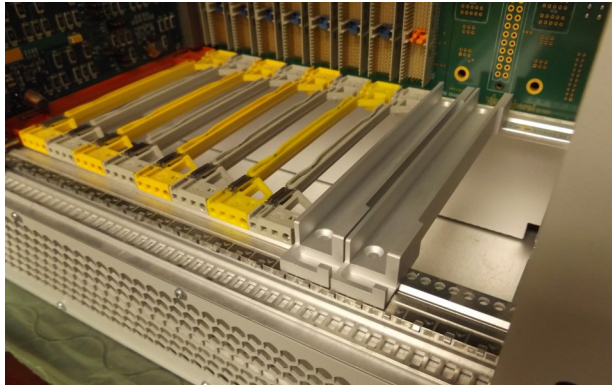
The modular card guides can be adjusted to allow 1.0" pitch or other spacing in .2" increments. Conduction-cooled card guides are also available for testing and development.

The VPX6VR180 has various power and backplane configuration options, VITA 66/67 and SOSA aligned designs. Consult Pixus for off-the-shelf options and customized configurations.

The outside of the chassis has a clear chromate finish, contact Pixus for custom painting options.



## CONDUCTION COOLED CARD GUIDES (Optional)



The conduction-cooled card guides allow modules with wedge locks to be plugged into the enclosure. This is used only for prototyping and development.

## ULTRAMOD POWER SUPPLIES FOR OPENVPX (Optional)



Model	Vnom (V)	Set Point Adjust Range (V)	Dynamic Vtrim Range (V)	I <sub>max</sub> (A)	Power (W)	Remote Sense	Power Good
XgA	12.0	10.8-15.6	-	12.5	150	-	-
XgB	24.0	19.2-26.4	-	8.3	200	-	-
XgC	36.0	28.8-39.6	-	5.6	200	-	-
XgD	48.0	38.5-50.4	-	4.2	200	-	-
XgE/Xg7	24.0	5.0-28.0	-	5.0	120	-	Yes
XgF/Xg8	24.0	5.0-28.0	-	3.0	72	-	Yes
	24.0	5.0-28.0	-	3.0	72	-	Yes
XgG	2.5	1.5-3.6	1.15-3.6	40.0	100	Yes	Yes
XgH	5.0	3.2-6.0	1.5-6.0	36.0	180	Yes	Yes
XgJ	12.0	6.0-15.0	4.0-15.0	18.3	220	Yes	Yes
XgK	24.0	12.0-30.0	8.0-30.0	9.2	220	Yes	Yes
XgL	48.0	28.0-58.0	8.0-58.0	5.0	240	Yes	Yes
Xg1	2.5	1.5-3.6	1.15-3.6	50.0	125	Yes	Yes
Xg2	5.0	3.2-6.0	1.5-6.0	40.0	200	Yes	Yes
Xg3	12.0	6.0-15.0	4.0-15.0	20.0	240	Yes	Yes
Xg4	24.0	12.0-30.0	8.0-30.0	10.0	240	Yes	Yes
Xg5	48.0	28.0-58.0	8.0-58.0	6.0	288	Yes	Yes

### UltraMod powerPacs

Model	Slots	Power	Medical Approval	Industrial Approval
			UL/EN60601-1 3rd edition	UL/EN60950 2nd edition
UX4	4	600W	Yes	Yes
UX6	6	1200W	Yes	Yes

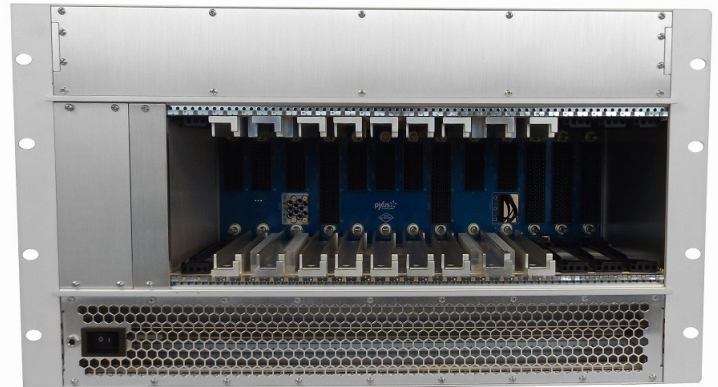
Pixus will select the UX sub-modules based on the power per rail that you require and ensure that we provide ample wattage with overhead. We install a separate small PSU for fans in the chassis to reduce noise. The noise level for all rails on the UltraMod PSUs is guaranteed to be no more than the greater of 1% or 100mv.

## Pluggable Power Supplies (Optional)



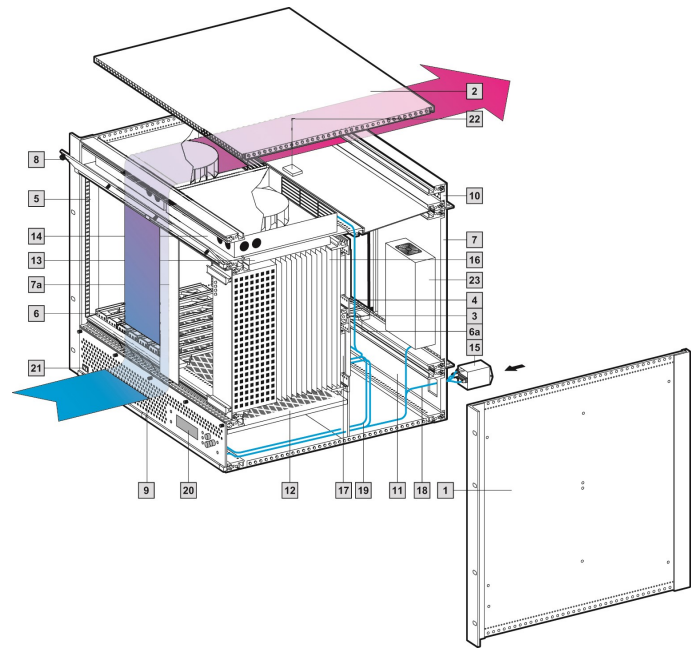
Pixus can provide VITA 62 or other pluggable power supplies for OpenVPX. Our VITA 62 power interface boards are available in single or dual versions and both 3U and 6U sizes. Pixus can also integrate VITA 62 slots into customized OpenVPX backplanes.

## Example with VITA 66/67 interfaces and Conduction-Cooled Card Guides



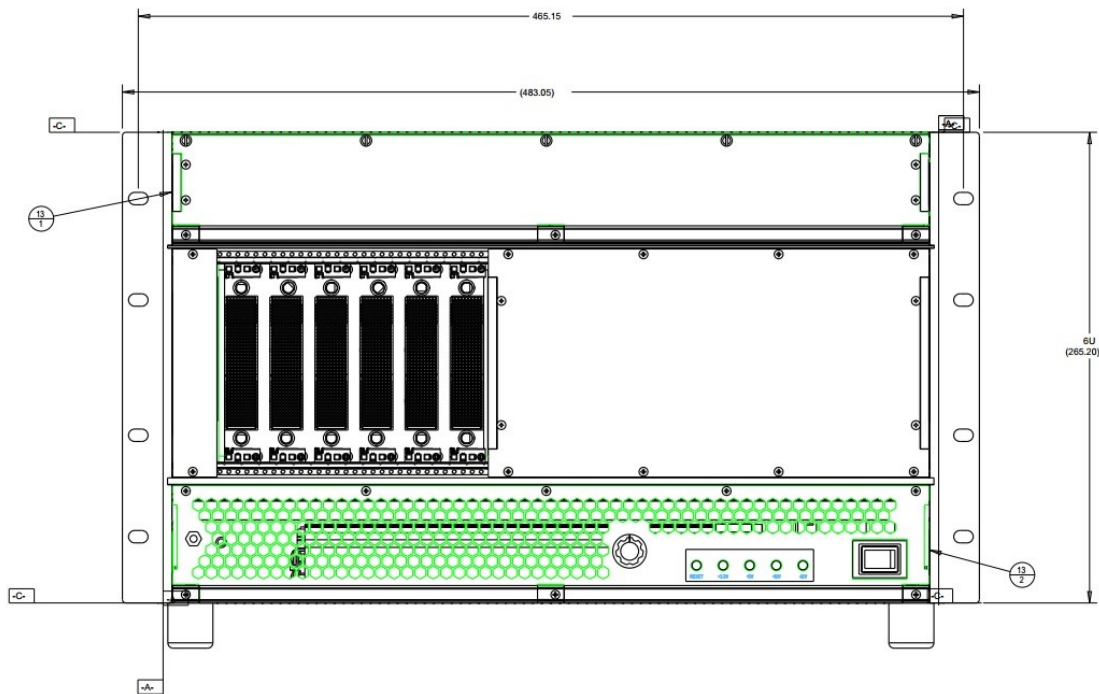
Pixus has a vast array of VITA 66/67 configurations and SOSA/OpenVPX profiles. Contact Pixus to discuss your application.

## Cooling Configuration



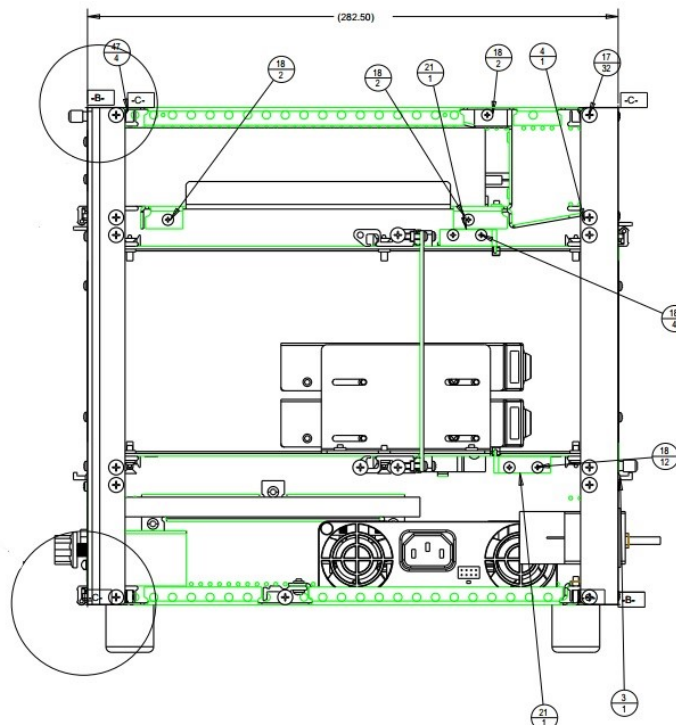
The RiCool blowers are hot swappable. The diagram on the right depicts a 6U board configuration.

## Front View



A 6-slot backplane is shown, but other configurations are available.

## Side View



## SOSA Aligned Profiles

Pixus has multiple backplane options that support various SOSA slot profiles. SOSA aligned systems utilize just the 12V (VS1) rail along with some 3.3 AUX. The IPMB is routed across the backplane to support the use of a SOSA aligned chassis manager and VITA 46.11 compliant versions. Visit <https://pixustechnologies.com/products/enclosure-system-solutions/vpx-vme64x-chassis-2/openvpx-3u-6u-sosa/> to see Pixus' offering of SlotSaver™ mezzanine-based and pluggable SOSA aligned/VITA 46.11 chassis manager options.

Examples of the wide variety of options are shown below. Several of the Pixus power and ground and routed backplanes have cutouts for Aperture H (VITA 67.3c) or other RF/Fiber sizes (Aperture J—VITA 67.3d, etc)

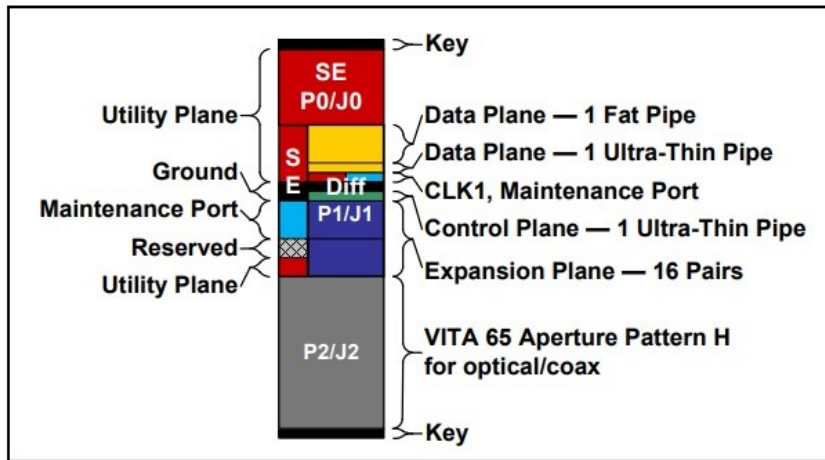


Figure 14.6.11-1 SLT3-PAY-1F1U1S1S1U1U2F1H-14.6.11-n

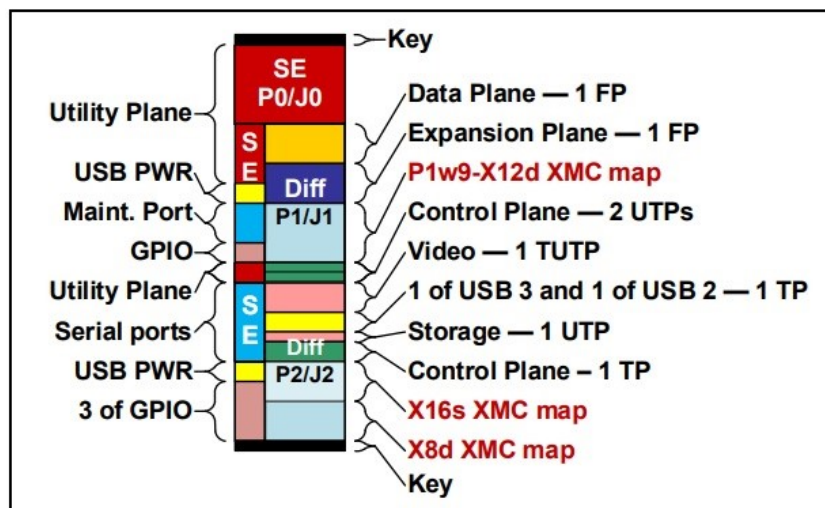


Figure 14.2.16-1 SLT3-PAY-1F1F2U1TU1T1U1T-14.2.16

## SPECIFICATIONS

Architecture		
Physical	Dimensions	6U
		Width: 19" rackmount
		Depth: ~11"
		Weight: ~35-38 lbs depending on configuration
Type	OpenVPX Chassis	Up to eighteen 3U OpenVPX slots (at 0.8" pitch)
Standards		
OpenVPX, SOSA	Type	VITA 65, VITA 46, SOSA
Configuration		
Power	VPX6VR180	Up to 1200W supply AC or DC, fixed. Higher power supplemental approaches are available.
		110-240AC with frequency from 47-63Hz and DC -36V to -72V
Environmental	Temperature	Operating Temperature: 0° to 55°C
		Storage Temperature: -40° to +70°C
	Altitude	10,000ft operating
		40,000ft. Non-operating
Relative Humidity	5 to 95 percent, non-condensing	
Conformal Coating		Humiseal 1A33 Polyurethane
		Humiseal 1B31 Acrylic
Other		
MTBF	MIL Handbook 217-F@ TBD Hrs.	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Standards	ISO9001:2015 and AS9100B:2004 standards	
Compliance	RoHS and NEBS	
Warranty	Two years	
Trademarks and logos	The Pixus Logo is a registered trademark of Pixus Technologies Inc. other registered trademarks are the property of their respective owners. Specs. subject to change without notice.	

## ORDERING OPTIONS

### VPX6VR180-ABC-DEF-XX

#### A = Power Type

- 0 = no PSU
- 1 = Ultramod 600W AC or DC, fixed
- 2 = Ultramod 1200W AC or DC, fixed
- 3 = Pluggable VITA 62 PSU (contact Pixus for configuration)
- 4 = Other

#### 2 digit customization code

Blank = standard, no customization

#### B = Backplane Payload slots (Not including PSUs)

- 0 = 5 slots
- 1 = 6 slots
- 2 = 12 slots
- 3 = 7 slots
- 4 = 8 slots
- X = backplane connectors not loaded in all slots
- 5 = 2 slots
- 6 = 3 slots
- 7 = 9 slots
- 8 = 16 slots
- 9 = Other

#### C = Backplane RTM Load

- 0 = No RTM connectors
- 1 = Partially loaded RTM connectors
- 2 = All RTM connectors loaded
- 3 = Other

#### DE = Backplane Configuration\*

- AA = BKP3-DIS03-15.2.9
- BB = BKP3-DIS06-15.2.7
- BD = BKP3-DIS02-15.2.8
- BF = BKP3-CEN09-15.2.17
- PG = Power and Ground Only
- XX = Other, consult factory for available configurations and 2-digit number code
- BA = BKP3-DIS05-15.2.13
- BC = BKP3-DIS06-15.2.14
- BE = BKP3-CEN06-15.2.2
- BG = BKP3-CEN07-15.2.3

#### F = Card Guides

- 0 = Standard card guides
- 1 = Conduction cooled module card guides
- 2 = Custom (mix of standard and conduction-cooled card slots)

\* This is only a very small subset of options, contact factory for more backplane options.