

VPX9VR180



VPX9VR180 KEY FEATURES

- 9U vertical-mount chassis platform for 6U OpenVPX cards or dual segments of 3U OpenVPX / SOSA aligned cards
- Supports RTMs for rear I/O
- Up to 16 slots of 6U boards at 1.0" pitch
- Cooling to 2500W, depending on configuration (with options of higher levels)
- Card guides can be adjusted in .2" increments to accept various slot pitches
- Front-to-rear cooled with dual powerful blowers: RiCool 3+ @ 191 CFM/ea
- Adjustable fan speed control
- Fixed or pluggable PSU solutions
- Redundant power supply options
- Low cost design
- Optional rubber "feet" for desktop applications
- VITA 67 for RF and/or VITA 66 for optical options available, designs for SOSA
- Customization available

OpenVPX[™]

SOSA[™]
Sensor Open Systems Architecture

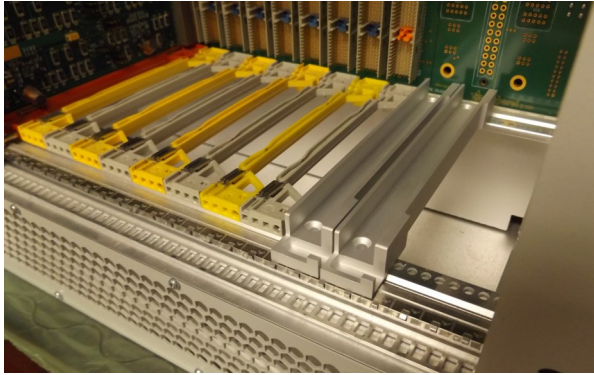
The VPX9VR180 is a 9U vertical-mount chassis that holds up to sixteen 6U slots at a 1.0" pitch. It is possible to also split the chassis to support dual rows of 3U boards or a mix of 3U and 6U boards. The RiCool chassis platform features powerful reverse impeller RiCool blowers that reside directly above 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.

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

The VPX9VR180 has various power and backplane configuration options, VITA 66/67 and SOSA-aligned designs. Consult Pixus for off-the-shelf options and customized configurations.

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 _{max} (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 UL/EN60601-1 3rd edition	Industrial Approval UL/EN60950 2nd edition	
UX	UX4	4	600W	Yes	Yes
	UX6	6	1200W	Yes	Yes

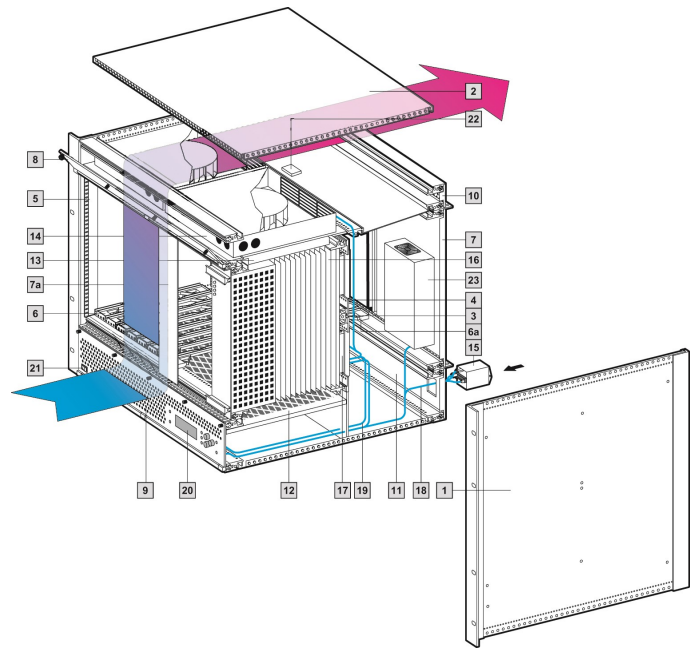
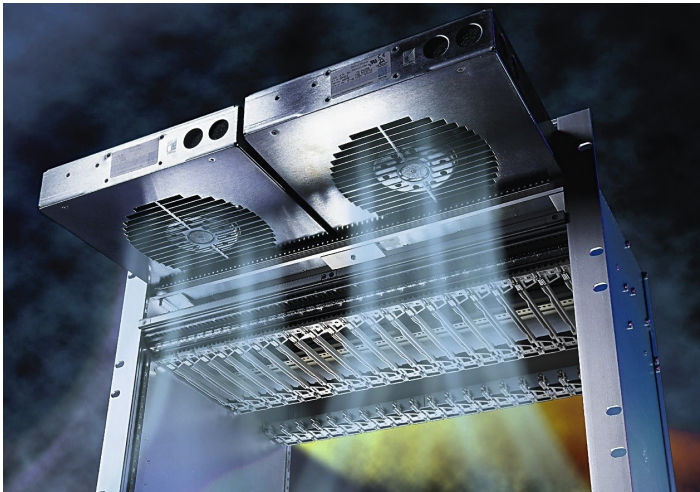
Pixus will select the UX sub-modules based on the power per rail that you require and ensure that we provide ample wattage with overhead. We install a separate small PSU for fans in the chassis to reduce noise. The noise level for all rails on the UltraMod PSUs is guaranteed to be no more than the greater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

Pluggable Power Supplies (Optional)



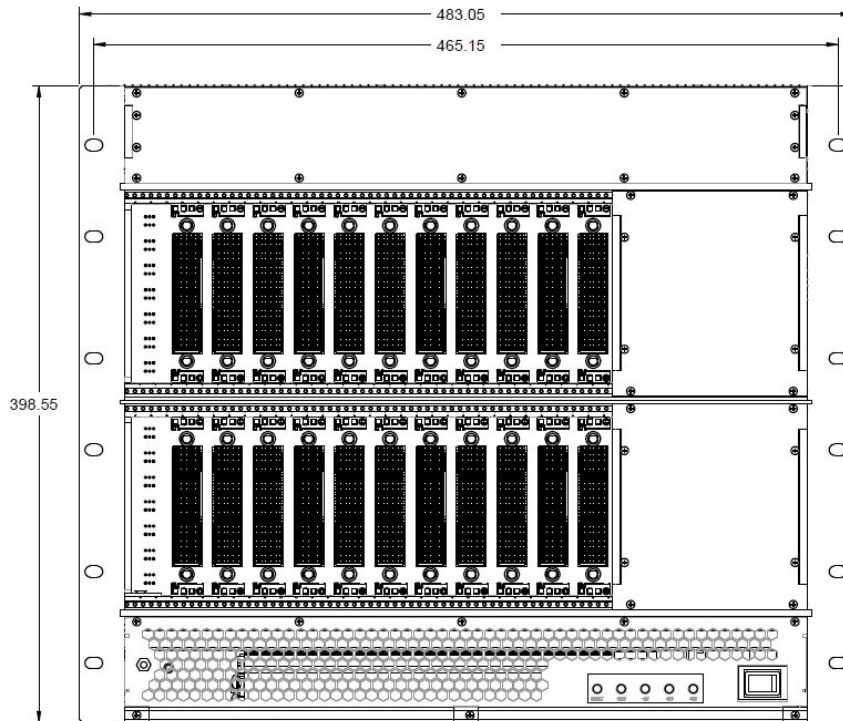
Pixus can provide VITA 62 or other pluggable power supplies for OpenVPX. Our VITA 62 power interface boards are available in single or dual versions and both 3U and 6U sizes. Pixus can also integrate VITA 62 slots into customized OpenVPX backplanes.

Cooling Configuration



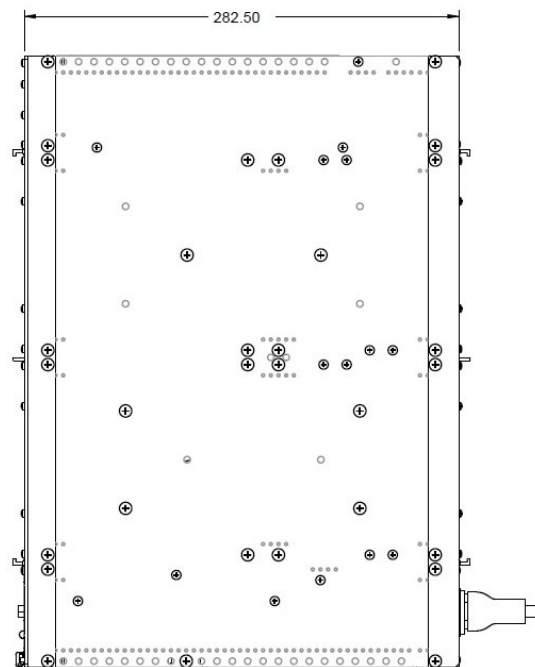
Examples of RiCool blowers in systems. The diagram on the right depicts a 6U board configuration.

Front View



The chassis allows for dual 3U backplanes or a 6U backplane to be utilized in the system. (Dual 3U 11-slot backplane is shown)

Side View



SOSA Aligned Profile Example

Pixus has multiple backplane options that support the 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)

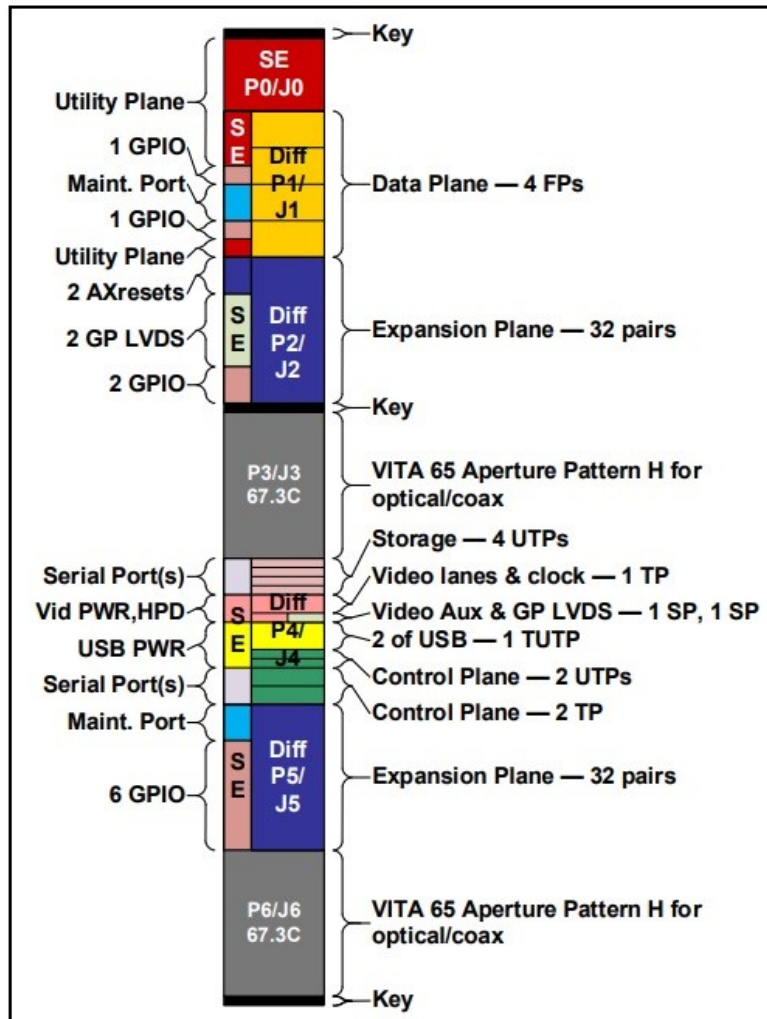


Figure 10.6.4-1 SLT6-PAY-4F2Q1H4U1T1S1S1TU2U2T1H-10.6.4-n

SPECIFICATIONS

Architecture		
Physical	Dimensions	9U
		Width: 19" rackmount
		Depth: ~11"
		Weight: ~39-46 lbs depending on configuration
Type	OpenVPX Chassis	Up to eighteen 6U OpenVPX slots (at 0.8" pitch)
Standards		
OpenVPX, SOSA	Type	VITA 65, VITA 46, SOSA
Configuration		
Power	VPX9VR180	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

VPX9VR180-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 | 5 = 16 slots |
| 1 = 6 slots | 6 = Other |
| 2 = 9 slots | 7 = 3 slots |
| 3 = 12 slots | 8 = 14 slots |
| 4 = 8 slots | 9 = 16 slots |
| X = backplane connectors not installed in all slots | |

C = Backplane RTM Load

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

DE = Backplane Configuration*

- AA = BKP6-CEN09-11.2.13 profile
- CC = BKP6-CEN05-11.2.5 profile
- CD = BKP6-CEN12-11.2.9 profile
- PG = Power and Ground Only
- XX = Other

F = Card Guides

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

* This is only a very small subset of configurations, contact the factory for other backplane options.