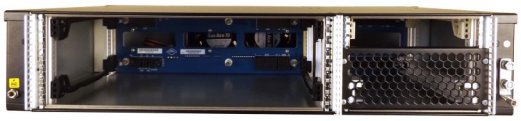
1U — 4U SlimBox for OpenVPX

EUR19VPX



KEY FEATURES

- Slimline horizontal-mount sheet metal solution
- 19" rackmount with rear IO option
- 1U-4U heights, ~300mm deep (other depths optional)
- 4U tall version supports up to (6x) 6U slots and (6x) 3U slots or (18x) 3U slots, depending on configuration options
- Up to 6 OpenVPX slots in 6U size at 1.0" pitch (more if 0.8" pitch is utilized)
- Hybrid mix of 6U and 3U slots is available
- Pluggable VITA 62 or fixed modular power supplies for VPX voltages (depends on user's configuration and use of RTM boards)
- Front-to-rear and side-to-side cooling options depending on configuration
- Front-loaded or rear-loaded options
- Commercial or semi-rugged options available
- Painted black standard, contact Pixus for custom paint options
- SOSA aligned options available

The EUR19VPX series is designed for 1U-4U horizontal-mount OpenVPX and SOSA aligned solutions. Pixus employs rugged rails and specialty components for OpenVPX. The versatile design allows 3U, 6U, or a hybrid mix of 3U/6U OpenVPX boards to be installed. Pixus will review your payload wattage and employ a cooling solution appropriate for your application. Options for VITA 66/67 and SOSA backplanes are available.

The EUR19VPX allows a standard VITA 62 PSU(s) to be plugged in or in most configurations, a modular fixed PSU for VPX voltages can be utilized.

Pixus offers a ruggedized version for shipboard and other applications with thicker metal, rugged extrusions, and a reinforced design for shock and vibration.

Contact Pixus to discuss the specifics of your application.

Pixus Technologies Inc. USA (916) 297-0020 Canada (519) 885-5775
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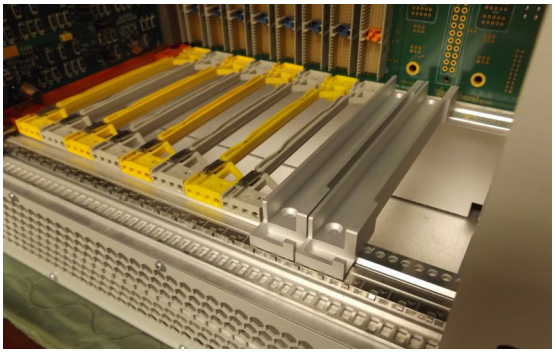
SPECIFICATIONS

Architecture		
Physical	Dimensions	1U-4U height (1U = 1.75 in), 19" rackmount (~ 17.8" actual width)
	Depth	~300mm
PCB Depth	Front Rear	160mm (other depths optional upon request) 80mm
Standards		
OpenVPX	Backplane Type	VITA 65, SOSA options
Configuration		
Power	Type	Various PSU options available, consult PSU datasheets
Environmental	Temperature	0 C to 55 C standard, MIL/industrial version –20C to 70C optional
		-40 C to 70 C non-operational temperature
	Altitude	10,000 ft operational (for rugged versions consult factory)
		40,000 ft non-operational
	Relative Humidity	5 to 95% non-condensing
Conformal Coating	Type	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	
Compliance	RoHS	
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.	

CONDUCTION COOLED CARD GUIDES



The conduction-cooled card guides allow modules with wedge locks to be plugged into the enclosure.

ULTRAMOD POWER SUPPLIES FOR OPENVPX

Model	Vnom (V)	Set Point Adjust Range (V)	Dynamic Vtrim Range (V)	Imax (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 typically uses the UltraMod power supplies in the EUR19VPX when the application will not use RTM boards. There is space for RTM cabling with the Ultramod placed on the bottom of the chassis in the rear.

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.

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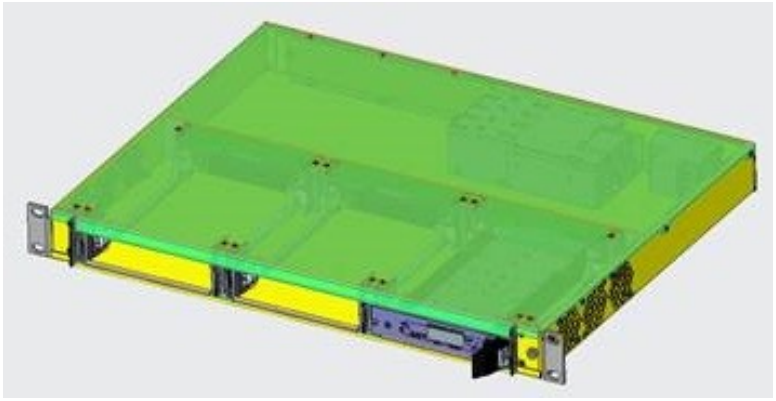
VITA 62 POWER INTERFACE BOARD OPTION

1U Horizontal for 3U OpenVPX Boards Example

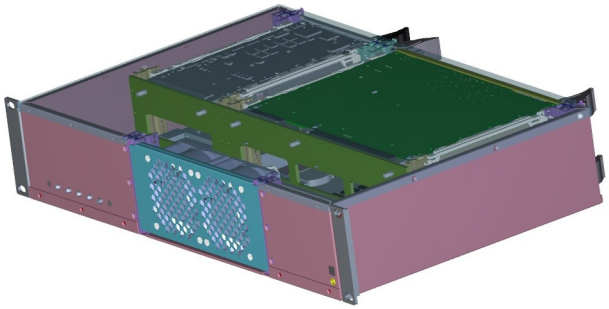


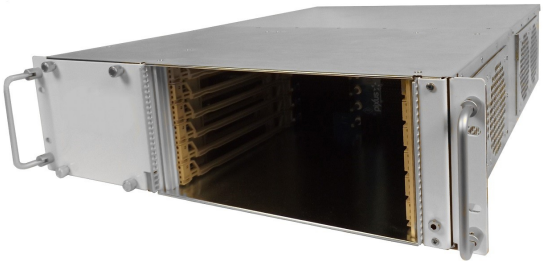
Pixus can provide VITA 62 or other pluggable power supplies for OpenVPX. Our VITA 62 power interface boards are available in single or dual versions and both 3U and 6U sizes. Pixus can also integrate VITA 62 slots into customized OpenVPX backplanes.

2U CHASSIS EXAMPLE (FRONT OR REAR LOADED OPTIONAL)

In a rear loaded design, a pull cooling approach with fans in the middle of the chassis is employed. For a front loaded design, a pull cooling approach with the fans located in the rear of the chassis is utilized.

EXAMPLES SHOWING 3U/6U HYBRID





A mix of 3U and 6U OpenVPX boards can be implemented in the 1U-4U OpenVPX horizontal-mount enclosures.

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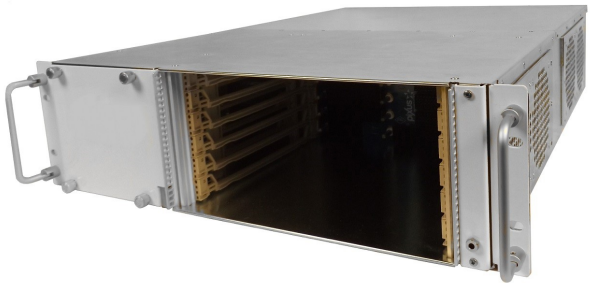
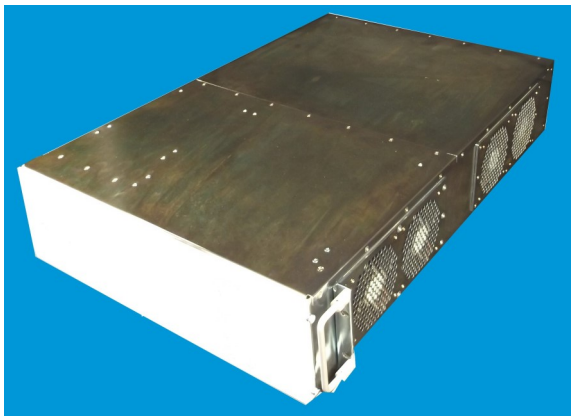
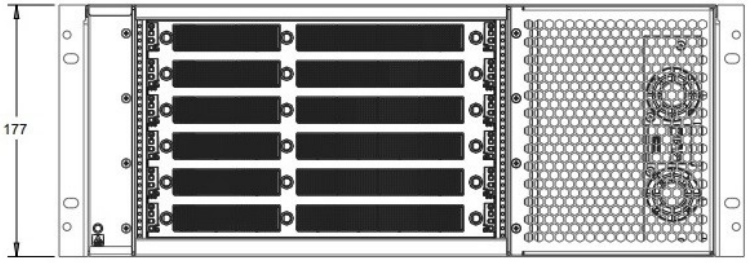
Ruggedizing your Chassis—3U Horizontal Example



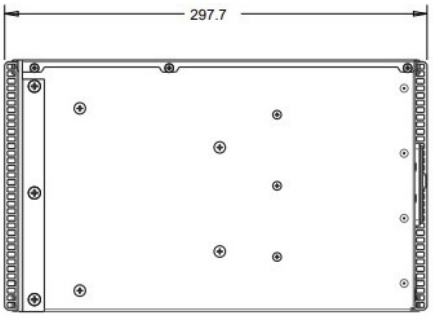


The commercial grade 3U horizontal mount chassis on the left was ruggedized to the version on the right. The changes include the boards recessed within the card cage, removable access covers, thicker metal for shock/ vibration, and optional MIL grade fans. Contact Pixus for ruggedization options for your 1U-4U horizontal mount chassis.

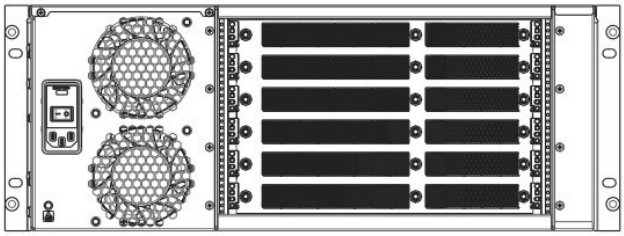
4U Horizontal Chassis —Front to Rear Cooling Example



Front view



Depth view



Rear view

The 4U horizontal mount chassis above is shown in a front-to-rear cooling configuration above. The standard front-to-rear cooled version has limited RTM (rear transition module) options depending on the slot configuration and power requirements. All of the Pixus 1U-4U horizontal mount chassis allow either all 6U boards, all 3U boards, or a mix of 3U and 6U boards to be incorporated. Contact Pixus for details.

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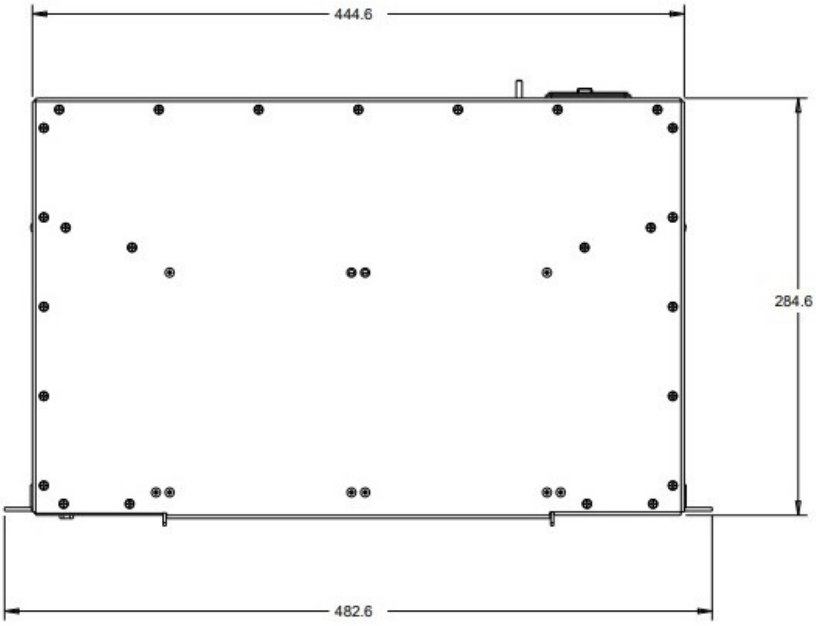
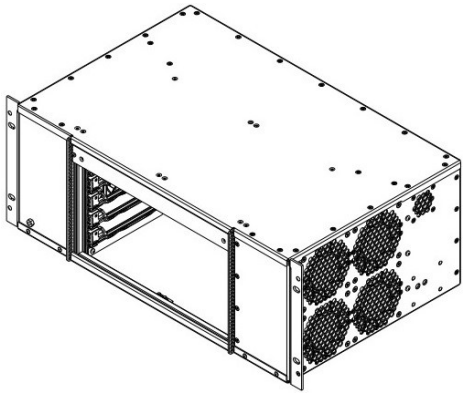
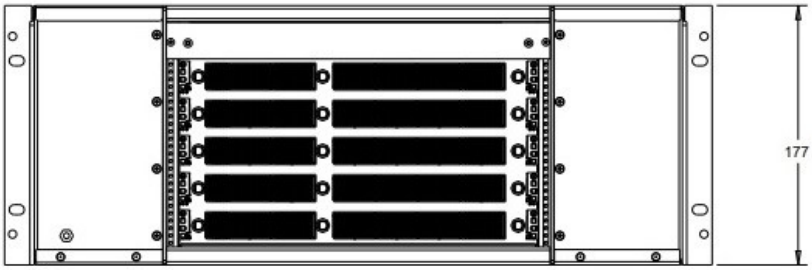
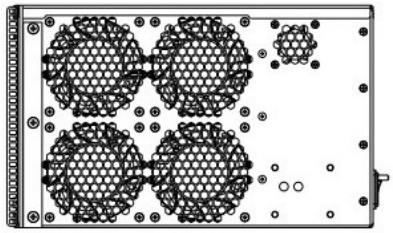
4U Horizontal Chassis — Side to Side Cooling example









This example shows a 6U OpenVPX configuration with side-to-side airflow. There is also space for a mix of 3U boards and 6U boards to be implemented next to each other. This configuration supports the optional use of Rear Transition Modules (RTMs).

ORDERING OPTIONS

H = Height (1U-4U)
1 = 1U, etc

EUR19VPX-HABC-DEF-G-XX

A = Power Type

0 = Not required
1 = Ultramod 600W AC, fixed (standard in 3U and 4U side to side cooled only)
2 = Ultramod 1200W AC, fixed (standard in 3U and 4U side to side cooled only)
3 = Pluggable VITA 62 PSU
4 = Other
5 = Nevo 600W PSU (standard when RTMs are required)

2 digit customization code

Blank = standard, no customization

B = Backplane Size

0 = Backplane for 3U boards
1 = Backplane for 6U boards
2 = Hybrid 3U/6U Backplane
3 = Other

C = Backplane Payload slots (Not including PSUs)

0 = Other
1 = 1 slot
2 = 2 slots
3 = 3 slots
4 = 4 Slots
5 = 5 slots
6 = 6 slots
7 = 7 slots
8 = 8 slots
X = backplane connectors not installed in all slots

D = Card Guides

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

E = Loading/Airflow

0 = Front loaded, side-to-side airflow, (standard option in all sizes)
1 = Rear loaded, front-to-rear airflow (standard for 2U version)
2 = Front loaded, front-to-rear airflow (standard for 4U version, other sizes optional)

F = Backplane RTM Load

0 = No RTM connectors installed
1 = RTM connectors fully loaded
2 = RTM connectors partially loaded
3 = Other

G = Conformal Coating

0 = Not required
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic