

# MISSION READY PROTOTYPING

*Design, develop, deploy  
your system faster*

Designed for ground vehicles the **REN VPX 4-Slot** chassis is a versatile solution that customers can use to Design, Develop and Deploy their VPX systems up to **TRL 4 or 5**. The COTS chassis is effectively a **Project Box** for VPX systems and it comes in two parts;



## 1). Inner 4 Slot Card Rack.

Holds up to 4 VPX SOSA conduction cooled cards with 1 inch pitch. Any 4 slot VITA VPX Backplane can be fitted OR single slot backplanes can be used to build a pseudo layout in the early development phases prior to burning a backplane specific to requirements. It takes VITA 62 standard PSU backplane and PSU units if required.

## 2). The Outer Case:

Once the customer has got everything running on the bench, the inner box can be bolted into the outer case. Customer can fit suitable connectors to the connector IO plate and the assembly can be utilised in a rugged application.

- The REN VPX 4 slot is generally available from 2 to 8 weeks delivery depending on stock at time of order.
- Sub 10K USD (No Backplanes) the chassis is a fast way to develop and test in the field.
- Designed with MIL STDs in mind the REN VPX 4 slot is a very rugged product and testing data points will be made available for customers in the future.



REN™ VPX 4-Slot Data Sheet

Main Parts

PART NUMBER	DESCRIPTION
12256-000 REN VPX	OUTER CASE GENERAL ASSEMBLY
12256-100-000 REN VPX	INTERNAL VPX CHASSIS

Power Supplies

PART NUMBER	DESCRIPTION
PCS-6362	VITA 62 compliant 3U Power Docking Board/ Backplane for VPX systems. 1 inch Pitch, takes 1 VPX slot
PSC-6234	VITA 62, 28V DC Input, 400 Watt PSU, 6CH Open VPX support
PSC-6236	VITA 62, 85-264V AC Input, 400 Watt PSU, 6CH Open VPX support
PSC-6236	VITA 62, 28V DC Input, 800 Watt PSU, 6CH Open VPX support. (See note)

Note:

Depending on what the ambient temperature requirement in the application are and available secondary cooling sources. A 800 watt PSU powering, high energy, usage cards could be incompatible with the REN VPX 4-Slot’s power dissipation capacity.



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Backplanes

PART NUMBER	DESCRIPTION
VPX-7997	3U 25 VITA 46 and 65 SOSA RT2 connectors, Gen 2 PCIe, 1.0 Pitch
VPX-7997-RS	As above but includes Meritec short rear shroud housing 981423UR with guide pins
VPX-0354	VITA 65 SOSA RT3 connectors, Gen 3 PCIe 25Gbps SOSA 14.2.16. 1.0 inch Pitch
VPX-0354-RS	3U VITA 65 SOSA RT3 connectors, Gen 3 PCIe 25Gbps SOSA 14.2.16. 1.0 inch Pitch with Meritec shroud.
VPX-0433	3U 1 slot VPX Backplane with RT-3, V67.3D, cutout J2B, with stiffener. 25gsps VITA 67.3 - SOSA. 1.2 Inch Pitch, (See Note B regarding the use of 1.2 pitch in REN)
VPX-8467	3U VITA 67.1 Single Slot Backplane
VPX-8467-RS	3U VITA 67.1 Single Slot Backplane with Meritec shroud (See note A)
VPX-8867	3U VITA 67.2 Single Slot Backplane
VPX-8867-RS	3U VITA 67.2 Single Slot Backplane with Meritec shroud (See note A)
VPX-9518	3U VITA 67.3 Single Slot Backplane
VPX-9518-RS	3U VITA 67.3 Single Slot Backplane with Meritec shroud (See note A)

**Note A:**  
Some RF connectors may have mechanical problems with the Meritec shrouds, TBD

**Note B:**  
VPX 1 slot backplanes with VITA 67.3x connectors are a 1.2 inch pitch. They can be used in 1 inch pitch chassis but ONLY in every other slot, ie 1 - 1.2 - 1 - 1.2.





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Unitronix are an innovative engineering-capable distributor and manufacturer of rugged, embedded computing solutions for military, aerospace and high-end industrial applications.

Established in 1984, we have supplied and supported Australian civil and defence programmes with reliable equipment needed to survive in some of the harshest environments.

In addition we design, develop and manufacture our own innovative Rugged Embedded Nodes - REN. These fully sealed project boxes have a high TRL and are aimed at new commercial industries such as: IoT, AI, Smart Grids, Data Analytics & Enterprise at the EDGE.

**REN boxes are reusable, reconfigurable, recyclable, cutting carbon footprint and saving cost.**

REN™ products are designed in Australia by Unitronix.  
REN™ boxes are made in Australia by Unitronix.  
REN™ Systems are built and tested in Australia by Unitronix.  
For UK customers in the future we will look at designing and manufacturing new designs in UK.

**Product Statement:**  
UNITRONIX provides an item of engineering utility of a generalised nature, COTs (commercial off-the-shelf). It is the customers responsibility to decide if this product is suitable and safe to use in the application they will be using the equipment. Customers are entirely responsible for the testing and subsequent performance of this equipment in their application. All sales are subject to Unitronix’s general terms and conditions.

REN SERIES
REN MINi
REN MAXi
REN 19-14 STD
REN 19-17 STD
REN 19 EW
REN 19-14 VPX
REN 19-17 VPX
REN Ai
REN VPX 4 Slot
REN VPX 6 Slot
REN VPX FlatPAK Assembly

**Unitronix  
New South Wales Office**  
Unit 9,  
37 Currans Road,  
Cooranbong,  
NSW 2265,  
Australia.

T: +61 (0)2 4977 3511  
E: [unisales@untronix.com.au](mailto:unisales@untronix.com.au)  
[www.unitronix.com.au](http://www.unitronix.com.au)

**Unitronix  
Queensland Office**  
Unit 7, 229 Junction Road  
Cannon Hill,  
Brisbane  
QLD 4170,  
Australia.

T: +61 (0)438 274333  
E: [unisales@untronix.com.au](mailto:unisales@untronix.com.au)  
[www.unitronix.com.au](http://www.unitronix.com.au)

**Unitronix UK**  
Office 102 Milton Keynes Business Centre  
Hayley Court, Foxhunter Drive,  
Linford Wood,  
Milton Keynes  
MK14 6GD  
United Kingdom

T: +44 (0)1908 698810  
E: [sales@unitronix.co.uk](mailto:sales@unitronix.co.uk)  
[www.unitronix.co.uk](http://www.unitronix.co.uk)