## 12R2 9U, Front Loaded



## FEATURES

- VME, VME64x, VXS, VPX, cPCI or MicroTCA compatible
- 19" rackmount per IEC60297 (slide mounting optional)
- 9 UH , standard depths 22 "and $25^{\prime \prime}$
- 2-20 slot, IEEE 1101.10/.11 compliant card cages, front load
- Optional device mounting
- Front to rear evacuative cooling (350 LFM @ .1" H20)
- Custom rear I/O patch panel (rear I/O cards optional)
- MIL grade components
- Front mounted LEDs for; voltage monitoring, fan fail and over temp
- 500-1400 watt PSU options
- Input options: 90-264VAC Fixed PSU, $47-500 \mathrm{~Hz}, 28 / 48 \mathrm{VDC}$


## PRODUCT INFORMATION

The 9U, 12R2 is designed to meet the harsh environment of shipboard, airborne, and ground mobile applications per MIL-STD's. The front load card orientation optimizes space efficiency, serviceability and cooling. Highly configurable, the unit can be ordered with choice of VME, VME64x, VXS, VPX, CPCI or MicroTCA, fixed or shock isolated card cage, rear I/O card mounting, device mounting, 500 to 1200 watt PSU, AC or DC input and custom I/O patch panel. Available in both 22 " and 25 " depths the unit holds up to 20 , front loaded cards (fixed). Airflow is front to rear utilizing high volume fans. Shock isolated versions are designed to attenuate 25 G shock inputs to the chassis to less than 10Gs at the card cage. All components, materials and design concepts are chosen to meet the applicable MIL-STD environments. The units come completely assembled and wired.

## ORDERING INFORMATION



| Description | Order Number |
| :--- | :--- |
| - $9 \mathrm{~h} \times 22$ " d |  |
| - Holds $20,6 \mathrm{U} \times 160 \mathrm{~mm}$ cards, fixed mounted, front load |  |
| - Rear IIO patch panel |  |
| - 20 slot VME64x backplane w/P0 | 12R2200PXX98N5VCF4 |
| No device mounting |  |
| - 1000 watt, 90-264VAC PSU, $47-500 \mathrm{~Hz}$ |  |
| - $2 \times 235 \mathrm{cfm}, \mathrm{HV}$ fan |  |



| Description | Order Number |
| :---: | :---: |
| - $9 \mathrm{Uh} \times 22^{\prime \prime} \mathrm{d}$ <br> - Holds $14,6 \mathrm{U} \times 160 \mathrm{~mm}$ cards, shock isolated, front load <br> - Rear I/O patch panel <br> - 18 slot VXS Dual Star backplane <br> - No device mounting <br> - 1200 watt, $90-264 \mathrm{VAC}$ PSU, $47-500 \mathrm{~Hz}$ <br> - $2 \times 325 \mathrm{cfm}, \mathrm{HV}$ fan | 12R220LLXX98N5VCL4 |



## CUSTOM CONFIGURATIONS

## 

- NUMBER OF SLOTS BP

00-20: Single BP AY-YA: Split
Example: 7 slot $=07$
Example: $12+9=\mathrm{LI}$

- BP BARE BOARD

A = CPCI (RSS)
$\mathrm{K}=$ VITA 31.1
L = VXS (DS)
M = V64, J12 mono, 3 row
N = VME64X, 6U
$0=V M E 64 X, 7 U$
$\mathrm{P}=\mathrm{VPX}, 6 \mathrm{U}$ (VITA 46)
$\mathrm{S}=\mathrm{VXS}$ (SS)
T = VXS (Mesh)
$X=$ No BP installed
Z = Custom
BP CONNECTOR CONFIG. J1/J2/P0
L = 5 row, w/o P0, w/ RT-2
M = 3 row, J1 flush, J2 13mm
$\mathrm{N}=3 \mathrm{row}, \mathrm{J} 1 / \mathrm{J} 2,17 \mathrm{~mm}$
$\mathrm{O}=5 \mathrm{row}, \mathrm{w} / \mathrm{P}$ PO
$\mathrm{P}=5 \mathrm{row}, \mathrm{w} / \mathrm{PO}$
$\mathrm{Q}=3$ row, 13 mm
$\mathrm{R}=3 \mathrm{row}, 17 \mathrm{~mm}$
$\mathrm{S}=\mathrm{RT}-2$ (J0-J6) 6 U
$D=\mathrm{CPCl}(\mathrm{P} 1 \& \mathrm{P} 2 \mathrm{~S} ; \mathrm{P} 3, \mathrm{P} 4, \mathrm{P} 5 \mathrm{~L})$
X = No connectors
Z = Custom
$\square$ DRIVES
$1=1 \times 3.5^{\prime \prime}$
$2=2 \times 3.5^{\prime \prime}$
$3=1 \times 5.25^{\prime \prime} \mathrm{HH}$
$4=2 \times 5.25^{\prime \prime} \mathrm{HH}$
$5=4 \times 5.25^{\prime \prime} \mathrm{HH}$
$6=2 \times 3.5^{\prime \prime}, 1 \times 5.25^{\prime \prime} \mathrm{HH}$
$7=1 \times 3.5^{\prime \prime}, 2 \times 5.25^{\prime \prime} \mathrm{HH}$
$9=1 \times 3.5^{\prime \prime}, 1 \times 5.25{ }^{\prime \prime} \mathrm{HH}$
A = $1 \times 2.5$ ", $1 \times$ CDROM (SL)
$B=2 \times 2.5^{\prime \prime}$
C $=6 \times 5.25^{\prime \prime} \mathrm{HH}$
D $=1 \mathrm{x}$ slim line CDROM
X $=$ Not installed

- DEVICE MOUNTING

F = Fixed mount devices
I = Shock isolated devices
$\mathrm{X}=\mathrm{N} / \mathrm{A}$
-HEIGHT
$9=9 U$

- WIDTH
$8=84 T$
$\square$ CARD CAGE
Y = Fixed w/ Rear I/O
$\mathrm{N}=$ Fixed no Rear I/O
F = Isolated w/ Rear I/O
| = Isolated no Rear I/O
-DEPTH
$4=400 \mathrm{~mm}-499 \mathrm{~mm}$
$5=500 \mathrm{~mm}-599 \mathrm{~mm}\left(22^{\prime \prime}\right)$
$6=600 \mathrm{~mm}-699 \mathrm{~mm}(25 ")$
$7=700 \mathrm{~mm}-799 \mathrm{~mm}$
-CARD ORIENTATION
V = Vertical
$\square$ PSU INPUT
C = 90-230VAC (Fixed)
$\mathrm{G}=90-230 \mathrm{VAC}$ (Plug In)
$\mathrm{H}=48 \mathrm{VDC}$ (Plug In)
$\mathrm{K}=48 \mathrm{VDC}$ (Fixed)
$\mathrm{M}=48 \mathrm{VDC}(2 \times \mathrm{HS}, \mathrm{N}+1)$
$\mathrm{N}=28 \mathrm{VDC}$ (Fixed)
$\mathrm{O}=28 \mathrm{VDC}(2 \times \mathrm{HS}, \mathrm{N}+1)$
$P=90-230 V A C(2 \times H S, N+1)$
Q = MIL-STD-704A, 28VDC
R = MIL-STD-704A, 90-230VAC
S = Custom
X = No PSU


## - PSU OUTPUT

(Note: Not all PSU combinations available)
$3=300-399$ watt (w/o 3.3V)
$4=400-499$ watt ( $w / 03.3 \mathrm{~V}$ )
$5=500-599$ watt (w/o 3.3V)
$6=600-699$ watt (w/o 3.3V)
$7=700-799$ watt (w/o 3.3V)
$8=800-899$ watt (w/o 3.3V)
$9=900-999$ watt (w/o 3.3V)
$\mathrm{A}=100-199$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
$B=200-299$ watt (w/3.3V)
C $=300-399$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
$\mathrm{D}=400-499$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
$\mathrm{E}=500-599$ watt (w/3.3V)
$\mathrm{F}=600-699$ watt ( $w / 3.3 \mathrm{~V}$ )
$\mathrm{G}=700-799$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
$\mathrm{H}=800-899$ watt (w/3.3V)
$\mathrm{I}=900-999$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
$\mathrm{J}=1000-1099$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
$\mathrm{K}=1100-1199$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
$\mathrm{L}=1200-1299$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
M $=1300-1399$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
$\mathrm{N}=1400-1499$ watt ( $\mathrm{w} / 3.3 \mathrm{~V}$ )
X $=$ Not installed
-SHIELDING LEVEL
2 = Level 2
4 = MIL-STD-461


