

# VAC Brick 19" Powered Rack Mounting Solutions

Rev A

PART NUMBER	SIZE	NUMBER OF 1 LAYER BRICKS	INPUT POWER	INTERNAL CONNECTORS
52-111-000	1U	6	100-130 VAC	P5
52-119-000	1U	6	100-130 VAC	2.5MM FLEX
52-114-000	1U	6	100-130 VAC	4 PIN ISOLATED
52-211-000	1U	6	200-240 VAC	P5
52-219-000	1U	6	200-240 VAC	2.5MM FLEX
52-214-000	1U	6	200-240 VAC	4 PIN ISOLATED
52-121-000	2U	12	100-130 VAC	P5
52-129-000	2U	12	100-130 VAC	2.5MM FLEX
52-124-000	2U	12	100-130 VAC	4 PIN ISOLATED
52-221-000	2U	12	200-240 VAC	P5
52-229-000	2U	12	200-240 VAC	2.5MM FLEX
52-224-000	2U	12	200-240 VAC	4 PIN ISOLATED
52-131-000	3U	18	100-130 VAC	P5
52-139-000	3U	18	100-130 VAC	2.5MM FLEX
52-134-000	3U	18	100-130 VAC	4 PIN ISOLATED
52-231-000	3U	18	200-240 VAC	P5
52-239-000	3U	18	200-240 VAC	2.5MM FLEX
52-234-000	3U	18	200-240 VAC	4 PIN ISOLATED

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## ***Two Year Limited Warranty***

All Video Accessory Corporation (VAC) products have a full two year limited warranty. Exclusions to the warranty include but are not limited to damage to external components, power LED failure where the product continues to function, and electrical damage due to lightning. The warranty shall be void if any alteration or repair of a VAC product is attempted by anyone not authorized by VAC. This warranty is expressly in lieu of all other warranties express or implied, including warranties of merchantability and fitness for use, and of all other obligations or liabilities on the part of VAC, and it neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of this product. This warranty shall not apply to the product or any part thereof subjected to accident, negligence, alteration, abuse, or misuse. No warranty whatsoever is made with respect to accessories or parts supplied by anyone other than VAC, and this warranty shall extend only to the original purchaser of this product. The warranty provided in this article is exclusive and in lieu of, and buyer hereby waives, all other remedies, express or implied, arising by law or otherwise, including consequential damages, whether or not occasioned by negligence of VAC. This warranty shall not be extended, altered or varied except by written instrument signed by VAC and buyer, and shall only apply within the boundaries of the continental United States. Liability of VAC is limited to repair or replacement at the option of VAC. Warranty work is to be sent to VAC. Freight charges will be the responsibility of the purchaser.

## *Document History*

<u>REV</u>	<u>Date</u>	<u>Action</u>
A	Jan. 21, 2015	New manual to support new web site

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## 1.0 Overview

VAC has 12 different Brick 19" powered rack mounting solutions. They come in 1U, 2U, and 3U 19" rack heights, 120 VAC or 220 VAC input power, and internal low voltage cables with P5, 2.5mm FlexPower, or 4 pin isolated power connectors to support the three different types of VAC Bricks. Each Brick is powered by an individual 500ma, 12 VAC output from one of the isolation transformers. The transformer provides isolation between each individual Brick as well as isolation from the AC power input.

Included with the rack unit is a 110 VAC or 220 VAC power cord and rack mounting screws.

## 2.0 Installation Considerations

These rack mount units are standard 19" rack 1U, 2U, or 3U units with a total depth of 15" including the IEC power cable plug. The Bricks sit on Brick Divider Plates and are held in place by a retaining clip (no tools are required to install Bricks). Undercut screws are provided to mount ½ Bricks to the divider plates. The divider plates can be removed so different size (number of layers) Bricks can be installed in the racks. The following table shows the capacities for each rack height. Different Brick sizes can be combined in a single rack unit.

RACK SIZE	TOTAL 1 LAYER BICKS	TOTAL 2 LAYER BICKS	TOTAL 3 LAYER BICKS	TOTAL 4 LAYER BICKS	TOTAL 5 LAYER BICKS
1U	6	3	NA	NA	NA
2U	12	6	3	3	NA
3U	18	9	6	3	3

All of the rack units have a removable cable management rod at the back of the unit. This rod can be removed without tools. After all of the cables are connected the rod can be installed and cables can be secured to the rod using tie wraps.

## 3.0 Power Requirements

The AC power input connector is a standard IEC power module. The rack units are available with 100-130 VAC input power or 200-240 VAC power input. The user must order the correct input power configuration for their application. Both the hot and neutral power lines are fused with 250V, slow-blow fuses (under the power transformer cover on the power input side)

1U Rack Units	1 amp fuses
2U Rack Units	2 amp fuses
3U Rack Units	3 amp fuses

The Earth ground from the IEC input module is connected to the metal frame of the rack unit.

## 4.0 Brick Power

Each 1 layer Brick location in a given rack has its own power cable. The power provided is 12 VAC at a maximum of 500ma. Each power cable is connected to its own secondary transformer winding so all of the Brick power connectors are isolated from each other.

There are three different internal Brick power cables that the user can select from.

- P5 – Barrel/pin connector used on all 12 VAC only Bricks
- 2.5mm FlexPwr – Switcher supply Bricks that run on DC or AC power
- 3.8mm 4 pin plug – Isolated power Bricks

The P5 and FlexPwr cables have two conductors, the isolated power cables have two conductors for the power and a chassis ground wire that attaches to the rack unit frame.

## 5.0 Specifications

Input Power	100-130 VAC 200-240 VAC	(52-1XX-000) (52-2XX-000)
Input Fuses	2AG, 250V, 1 amp 2AG, 250V, 2 amp 2AG, 250V, 3 amp	(52-X1X-000) (52-X2X-000) (52-X3X-000)
Brick Power	12 VAC, 500ma	
Internal Power Cables	P5 connectors 2.5mm FlexPwr connectors 3.8mm 4 pin Isolated	(52-XX1-000) (52-XX9-000) (52-XX4-000)
Mounting	Standard 19" rack screws and spacing	
Temperature	-40C to +40C	
Humidity	10% TO 90% non-condensing	
Size	1U 2U 3U	1.75" X 19" X 15" 3.50" X 19" X 15" 5.25" X 19" X 15"

## 6.0 Ordering Product

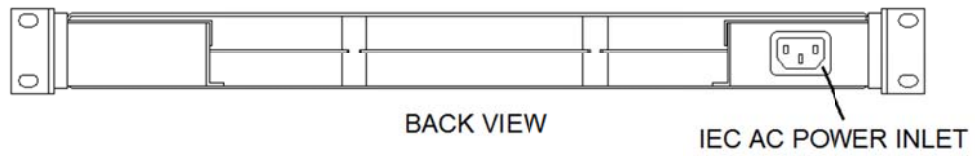
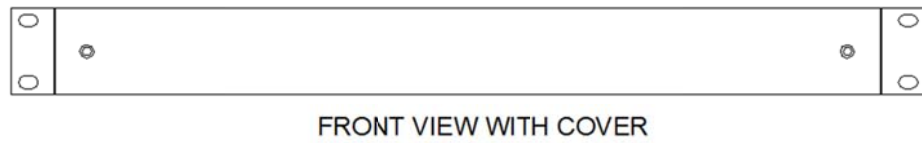
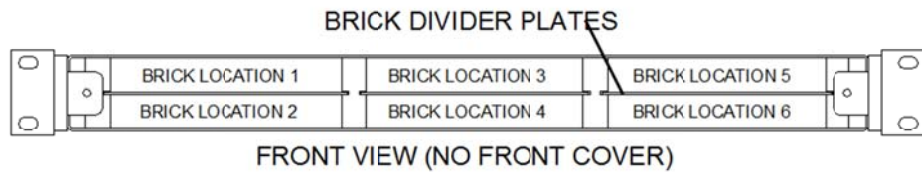
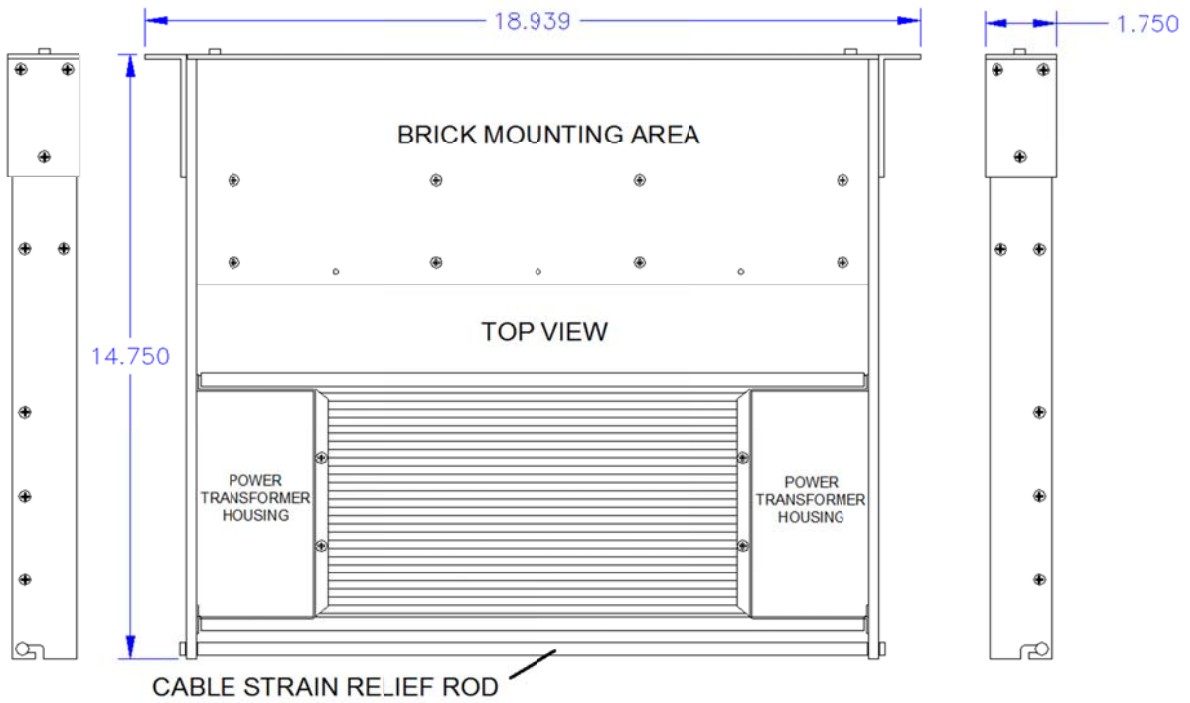
The user needs to determine three items before ordering product.

- Unit size (1U, 2U, or 3U)
- Input Power (110 VAC or 220 VAC)
- Type of internal power cables (see section 4.0)

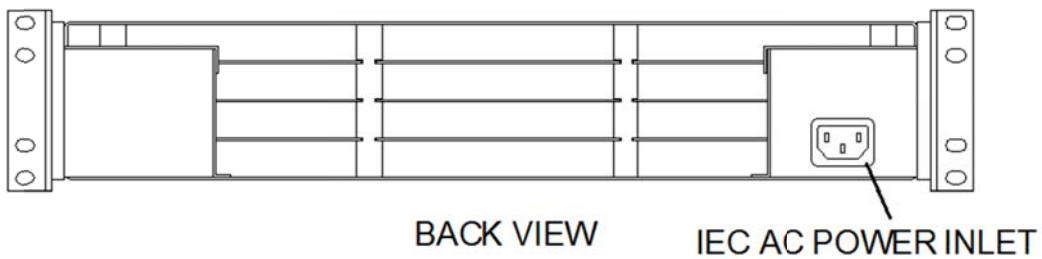
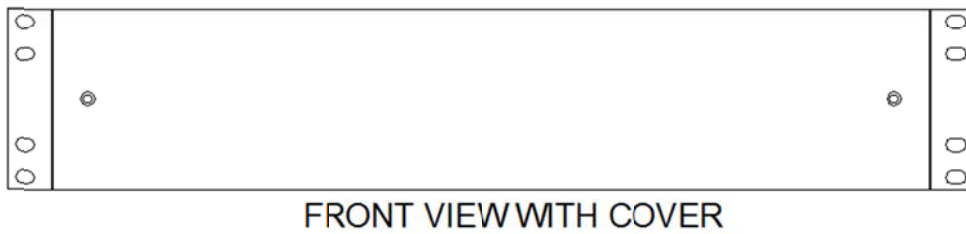
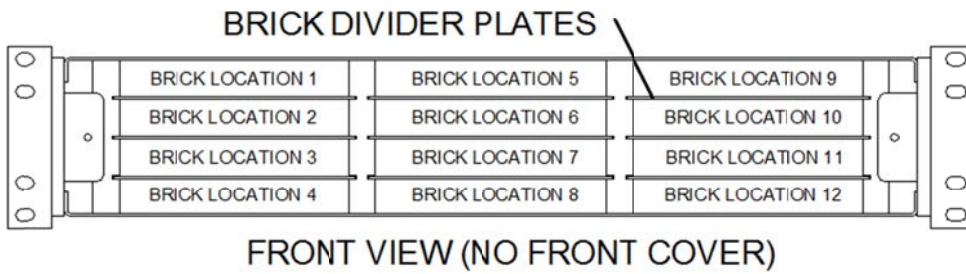
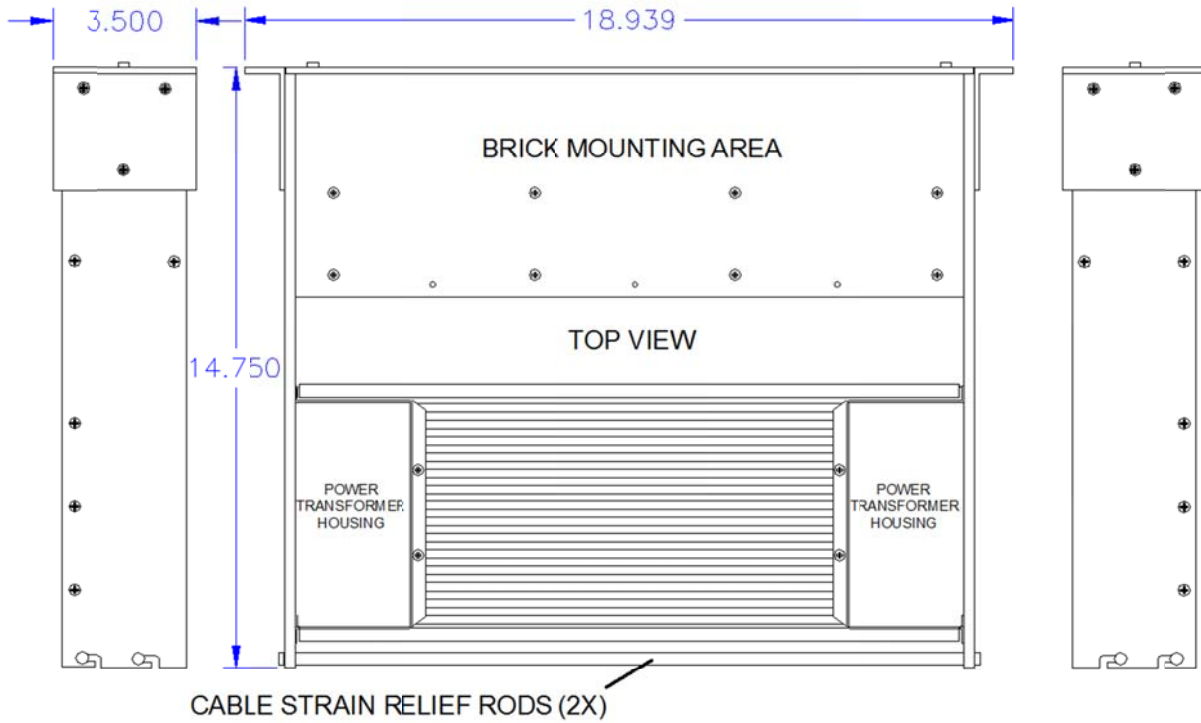
After determining the above three items, the correct part number can be located on the front page of this specification.

Please call the factory with any questions concerning your specific application.

# 7.0 1U Package



# 8.0 2U Package



# 9.0 3U Package

