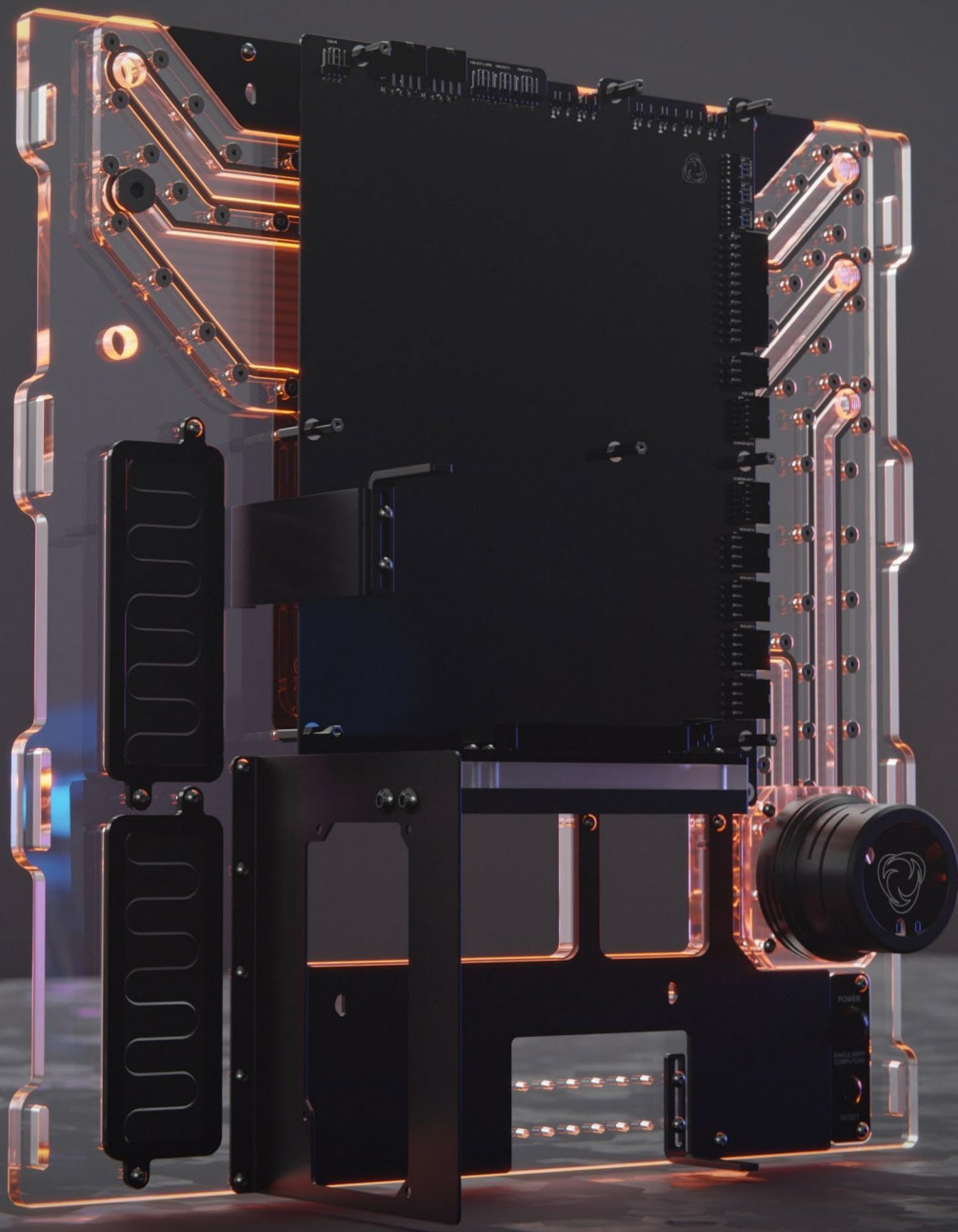


PORTAL

WALL MOUNTED WATER-COOLING CASE



MANUAL

Revision 1.4

Table of Contents

Introduction 2

Specifications & Included Items 2

Diagrams.....3

Portal PowerBoard..... 4

Introduction

Portal is an open wall mounted display case. It fits 2x 420mm radiators, one on each side of the motherboard. There is no limitation to radiator or fan thickness. It has an integrated distribution plate with D5 pump top and reservoir and parts of the loop are also integrated for short and clean loop routing. The GPU mounts vertically and a full sized ATX PSU fits underneath. It fits ATX or E-ATX motherboards. Motherboard and GPU cables pass through to the back of the case and can be run down the wall. There is a PowerBoard option to improve cable management. Portal has power and reset buttons in the bottom right corner.

Specifications & Included Items

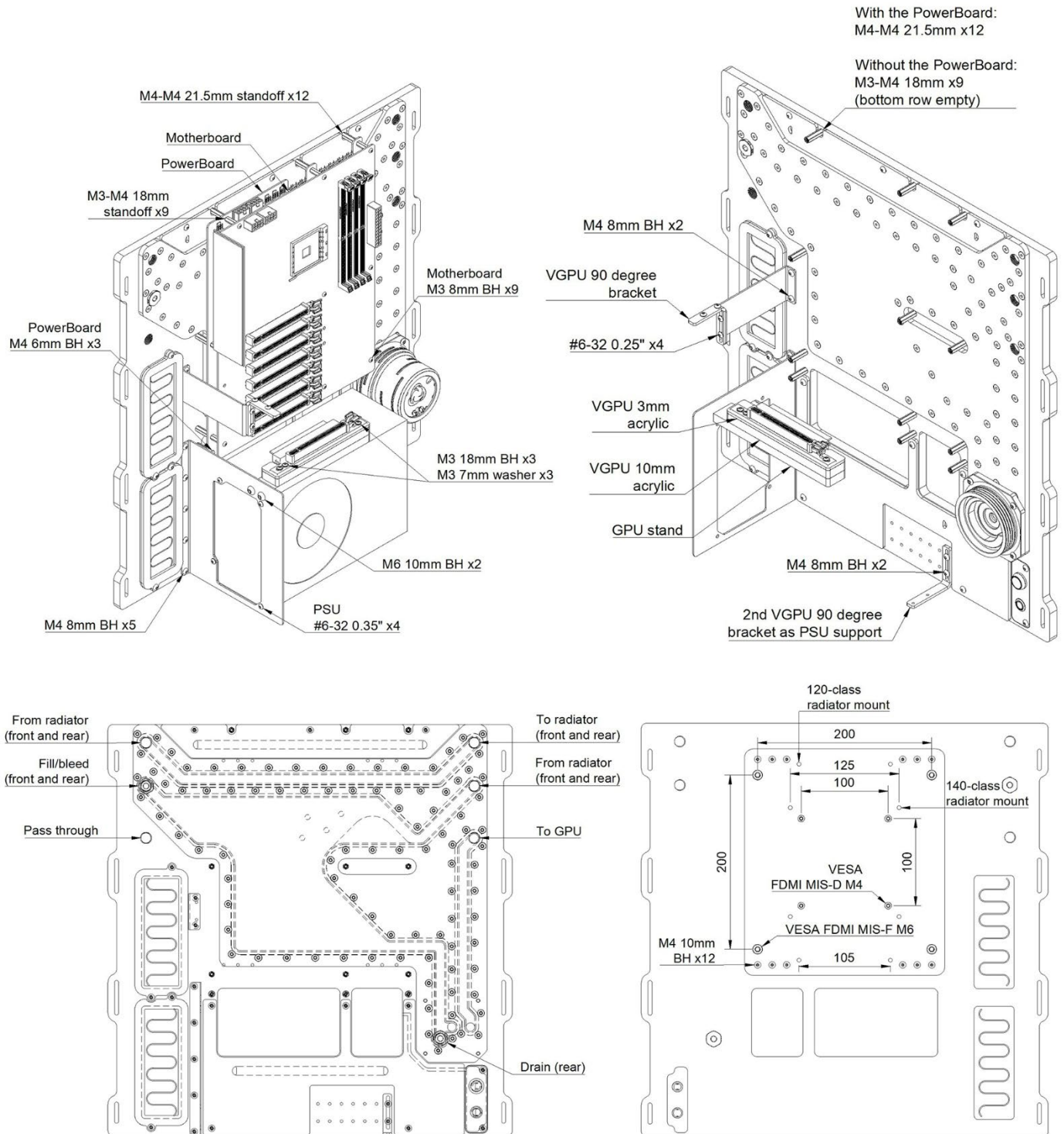
Water-cooling Integration	Reservoir, Pump Top, Pump Cover, Fill Port, Drain Port, Parts of water-cooling loop. Ports: x12 G1/4" BSPP. 1x Fill Port. 1x Drain Port.
Motherboard Form Factor	E-ATX, ATX, Mini-DTX, Mini-ITX.
Case Dimensions	TBA
Case Weight	TBA
Packaged Dimensions	L: 600mm x W: 500mm x H: 100mm. (Case is flat packed and requires partial assembly.).
Packaged Weight	8kg.
Radiators	420mm x2 with unlimited thickness for radiators and fans.
Max. GPU Length	Unlimited.
Max. GPU Height	Unlimited.
Max. CPU Cooler Height	Unlimited.
Max. PSU Length	250mm.
Front Panel I/O	No Front I/O. Vandal Switch 16mm Power & Reset.
Vertical GPU Mount	x1 with PCIE 5.0 Riser
Vesa Mount	200mm x 200mm M6.
Materials	6061 Aluminum Anodized. Cast Acrylic. Steel. PCB.
Manufacturing Process	CNC Mill, CNC Lathe, CNC Router, Folding Steel, PCB.
Assembly	Distribution Plate Assembled by Hand. Metal Components need to be assembled and attached to the distribution plate by the customer.
Testing / Validation	All Distribution Plates are factory pressure tested and precise fastener tension is applied.

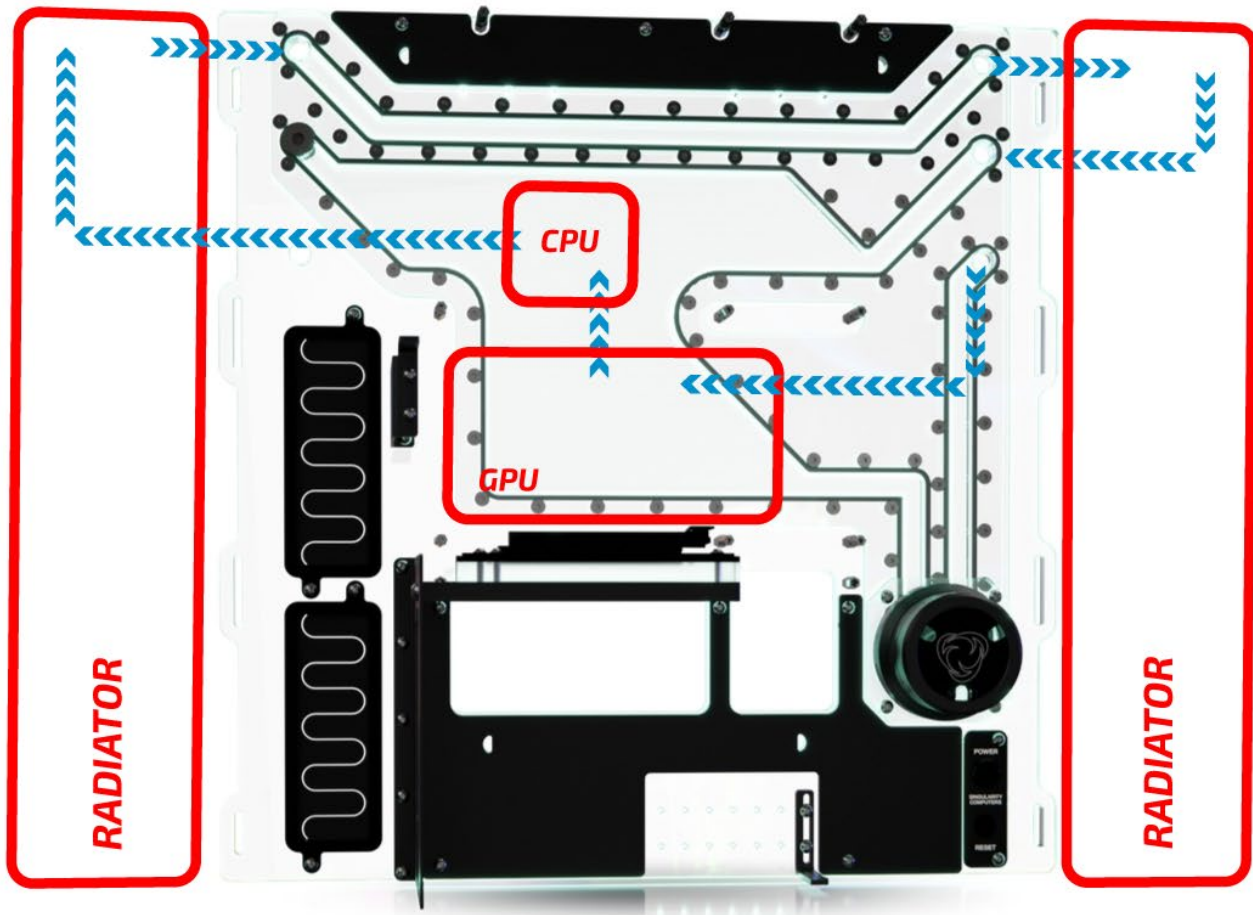
❗ Important Information

Please make sure to use the included O-Rings when installing the pumps. Remove the pump covers from the distribution plate, install the O-Rings into the O-Ring grooves on the pump tops. Then push the pump into the pump top and screw the cover on. Tighten the pump covers down firmly. We strongly recommend pressure testing your build prior to filling the loop. Contact support@singularitycomputers.com with any questions.

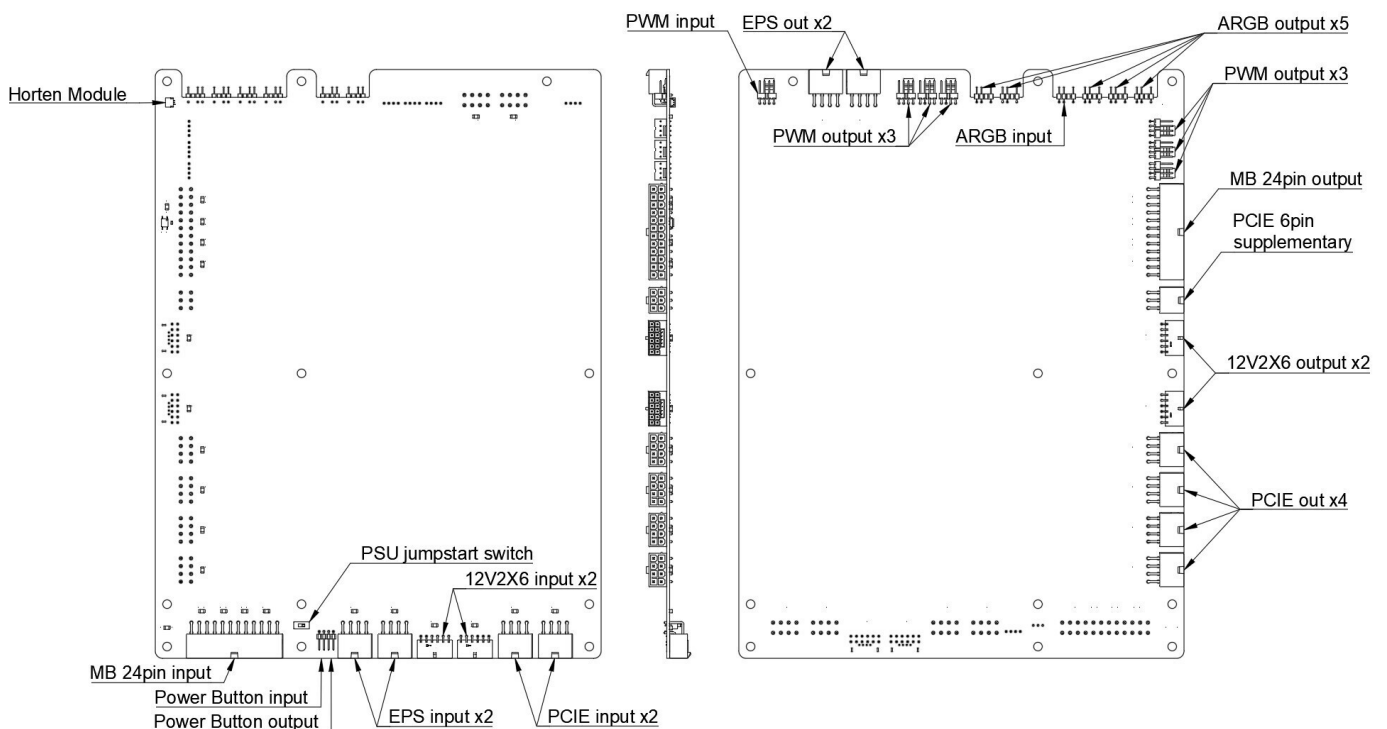
Diagrams

① Dimensions are in millimetres





Portal PowerBoard



⚠ All PowerBoards need PowerBoard Linking Cables.

Input Connections

- MB 24pin input x1
- EPS input x2
- 12V2X6 input x2
- PCIE input x2
- PWM input x1
- ARGB input x1
- Power Button input x1
- Horten Module input x1

Output Connections

- MB 24pin output x1
- EPS output x2
- 12V2X6 output x2
- PCIE output x4
- PCIE 6pin supplementary output x1
- PWM output x6
- ARGB output x5
- Power Button output x1

The Portal PowerBoard's extra feature is a PSU jumpstart switch that is able to power on the system without booting which simplifies filling and bleeding the loop. Connect the power supply's cables to the input connectors on the Portal PowerBoard. Use as many connections as many are used on the graphics card and motherboard. In general, a 12V2X6 connector equals to 2x PCIE in terms of power delivery and the PowerBoard converts PCIE to 12V2X6 and back. This allows using older power supplies with modern graphics card that need 12VHPWR or 12V2X6 or vice-versa. For an example if a graphics card needs 3x PCIE then for the power supply we can plug in 1x 12V2X6 and 1x PCIE to match that power requirement. If the Touch Button is used then connect it to the "HRTN" header on the Portal PowerBoard, and also connect the motherboard power button pins from the front panel header to the PowerBoard's "PWR_BTN" header's input side using the PowerBoard Switch Power cable.