A WL-MIO Processor integrates the industry accepted [Raspberry Pi 4 Model B](https://www.raspberrypi.org/products/raspberry-pi-4-model-b/specifications/?resellerType=home) {URL: https://www.raspberrypi.org/products/raspberry-pi-4-model-b/specifications/?resellerType=home } (system on a chip technology) to WL-MIO. A Raspberry Pi 4 is mounted to a WL-MIO’s Raspberry PI Carrier module. The full functionality of Raspberry Pi 4 is available for users to select their optimum software application and system management environment. Electrical control of the WL-MIO’s I/O modules is via Raspberry Pi’s GPIO interface. RS-485 and HART communications are available for additional flexibility for controlling I/O devices.

Multiple Processors modules are supported in a WL-MIO system depending on the control architecture desired. Processor modules may be plugged into any WL-MIO position to accommodate existing or structured wiring designs. WL-MIO’s Processor module is hot-swappable when upgrade or replacement is required.

Insert Picture of:

Processor (RPi and Carrier)

WL-MIO’ Process supports control software applications in these languages or application technologies:

* C
* C++
* Python
* Node-Red
* IEC-61499

During operation the Raspberry Pi 4’s USB 2, USB, 3 and Ethernet ports are accessible. Micro-HDMI ports, micro-SD card slot, MIPI DSI display port, MIPI CSI camera port, stereo audio and composite video port are accessible for custom development purposes only.

The WL-MIO Processor consists of two components, a Raspberry Pi 4 Model B, either WL-MIO Raspberry Pi Carrier Module & RS-485, or WL-MIO Raspberry PI Carrier Module, RS-485, and HART. **Factory assembled kits combining the Raspberry Pi 4 Model B and the WL-MIO Raspberry Pi Carrier module are available.**

~~For more information about the WL-MIO Processor components~~

|  |  |
| --- | --- |
| ~~Part Number~~ | ~~Part Name~~ |
| ~~VPE-6020-C~~ | ~~Raspberry Pi Carrier Module & RS485~~ **~~{HYPERLINK TO WL-MIO Raspberry Pi Carrier Specs}~~** |
| ~~VPE-6020-C-H~~ | ~~Raspberry PI Carrier Module, RS485, & HART~~ **~~{HYPERLINK TO WL-MIO Raspberry Pi Carrier Specs}~~** |

Insert Picture

Carrier without Raspberry Pi 4

Insert Picture

Raspberry Pi 4 Model B without Carrier

|  |  |
| --- | --- |
| ~~Part Number~~ | ~~Part Name~~ |
| ~~VPE-nnnn~~ | [~~Raspberry Pi 4 Module 4~~](https://www.raspberrypi.org/products/raspberry-pi-4-model-b/specifications/?resellerType=home) |
|  | ~~URL: https://www.raspberrypi.org/products/raspberry-pi-4-model-b/specifications/?resellerType=home~~ |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| VPE-RPi4-B-2mb | Raspberry Pi 4 Model B – 2 MB RAM | [Specs](https://www.raspberrypi.org/products/raspberry-pi-4-model-b/specifications/?resellerType=home) | [Configuration](https://wlmio.com/configuration.html) | [Ordering](https://wlmio.com/index.html) |
| VPE-6020-C | Raspberry Pi 4 & RS-485 Carrier Module | [Specs](https://wlmio.com/6020/index.html) | [Configuration](https://wlmio.com/configuration.html) | [Ordering](https://wlmio.com/index.html) |
| VPE-6020-C-H | Raspberry Pi 4, RS-485, & HART Carrier Module | [Specs](https://wlmio.com/6020/index.html) | [Configuration](https://wlmio.com/configuration.html) | [Ordering](https://wlmio.com/index.html) |
| VPE-60xx-A | Raspberry Pi 4 & RS-485 Carrier Processor Kit | [Specs](https://wlmio.com/6020/index.html) | [Configuration](https://wlmio.com/configuration.html) | [Ordering](https://wlmio.com/index.html) |
| VPE-60xx-A | Raspberry Pi 4, RS-485, & HART Carrier Module | [Specs](https://wlmio.com/6020/index.html) | [Configuration](https://wlmio.com/configuration.html) | [Ordering](https://wlmio.com/index.html) |