

## Industrial PC delivers maximum performance in automation

Modern production processes, the use of vision and AI systems, and the increasing spread of edge computing applications require systems with high performance and flexible scalability. Bosch Rexroth offers a powerful, future-proof solution with its broad portfolio. With its outstanding performance and versatility, the ctrlX IPC is the ideal choice for edge and IoT solutions as well as for highly complex production applications. Equipped with the latest Intel processor technology, the ctrlX IPC meets the high demands placed on computing, speed, and adaptability in today's industrial environment.

Thanks to integration into the ctrlX AUTOMATION platform, the portfolio also benefits from the comprehensive ctrlX WORKS software and engineering toolbox. The ctrlX IPC can also be easily combined with the industrial displays ctrlX HMI, which makes the industrial PC a universal and flexible visualization device.

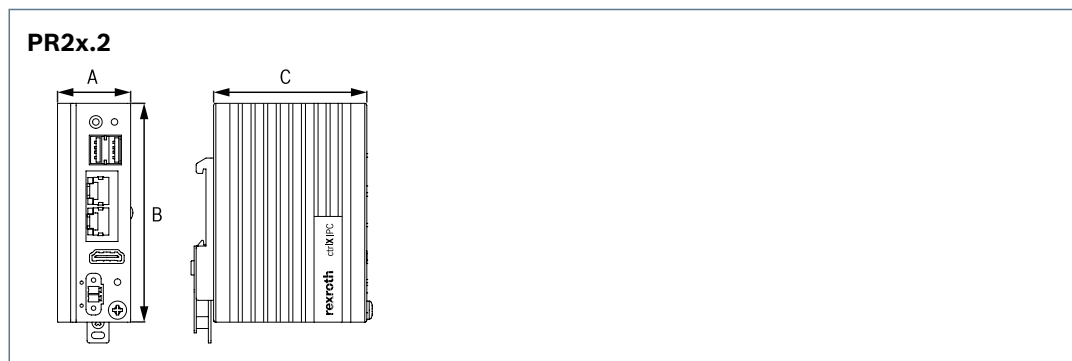
 [Configurator](#)

 [Community](#)

 [Contact](#)

You can find more information at: [www.ctrlx-automation.com/ctrlx-IPC](http://www.ctrlx-automation.com/ctrlx-IPC)

### Dimensions

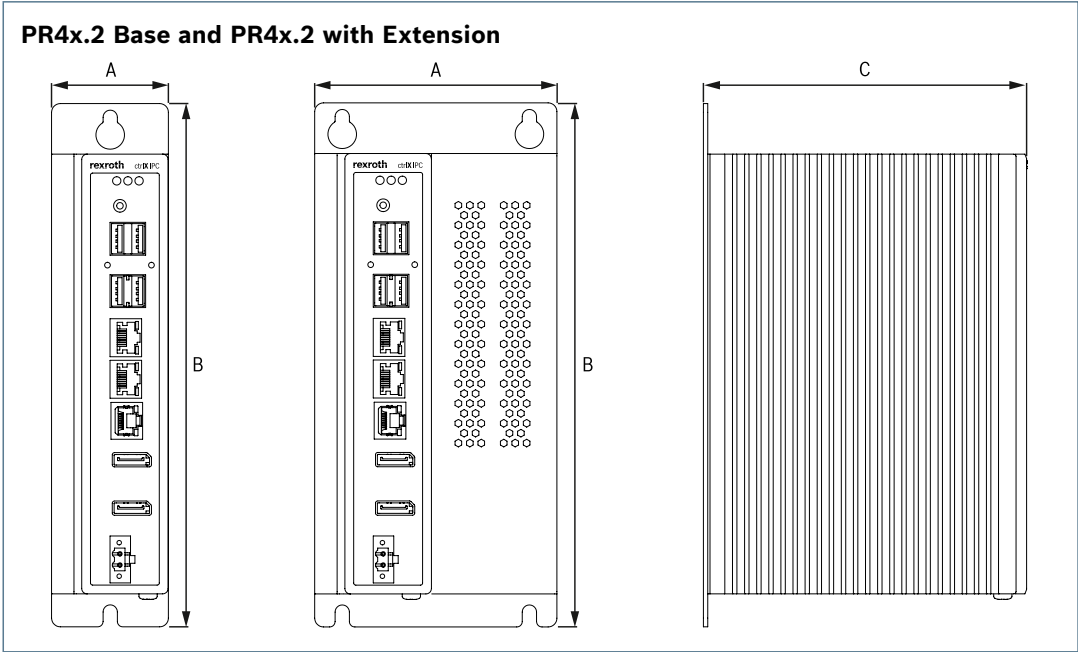


| Type | PR2x.2  |
|------|---------|
| A    | 33.4 mm |
| B    | 100 mm  |
| C    | 70 mm   |

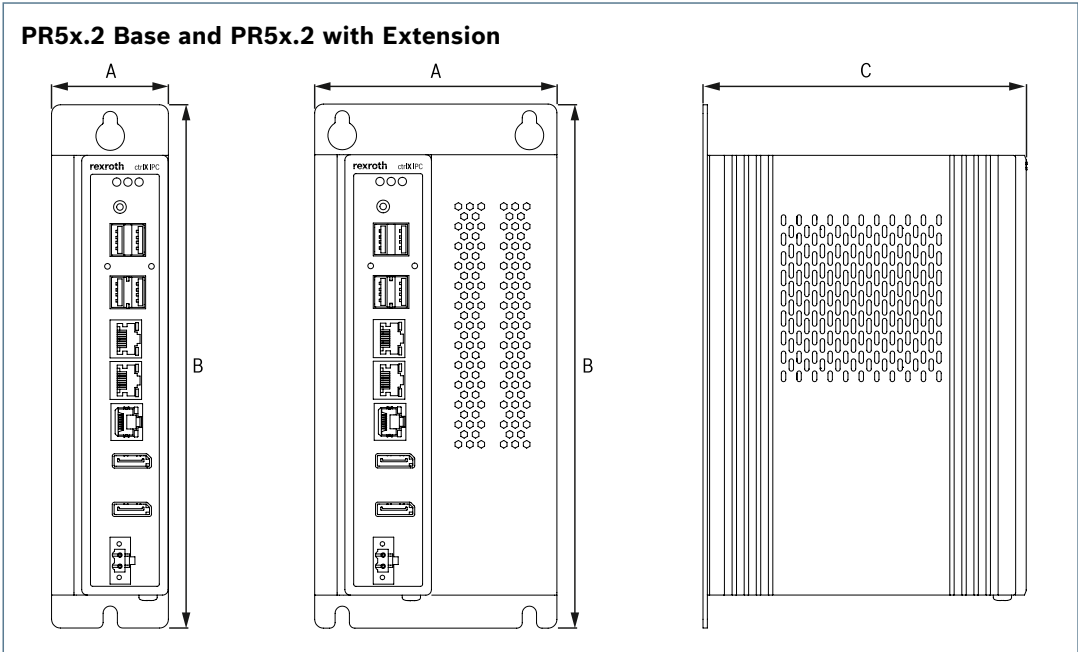




Dimensions



-  [Configurator](#)
-  [Community](#)
-  [Contact](#)



| Type | PR4x.2 Base and PR4x.2 with Extension | PR5x.2 Base and PR5x.2 with Extension |
|------|---------------------------------------|---------------------------------------|
| A    | 53 mm Base, 110 mm with Extension     | 53 mm Base, 110 mm with Extension     |
| B    | 238 mm                                | 238 mm                                |
| C    | 147 mm                                | 147 mm                                |



The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

### Performance data

| Type             | PR2x.2                                                             | PR4x.2                                                                                                      | PR5x.2                                 |
|------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------|
| CPU              | Intel Atom x6212RE;<br>1,20 GHz<br>Intel Atom x6414RE;<br>1,50 GHz | Intel Core i3-1315URE;<br>4,5 GHz<br>Intel Core i5-1345URE;<br>4,6 GHz<br>Intel Core i7-1365URE;<br>4,9 GHz | Intel Core i7-13800HRE;<br>5,0 GHz     |
| RAM              | 4 GB, optional 8 GB                                                | 16 GB, optional 32 GB                                                                                       | 16 GB,<br>optional 32 GB and 64 GB     |
| Operating system | Linux Ubuntu Core;<br>Windows 11 IoT Enterprise;<br>ctrlX OS       | Windows 11 IoT Enterprise;<br>ctrlX OS                                                                      | Windows 11 IoT Enterprise;<br>ctrlX OS |

### Hardware

| Type                  | PR2x.2                         | PR4x.2                                     | PR5x.2                                     |
|-----------------------|--------------------------------|--------------------------------------------|--------------------------------------------|
| PCI/PCIe Steckplätze  | –                              | optional 1x PCIe x4                        | optional 2x PCIe x4                        |
| Mini-PCIe Steckplätze | 1 x full size                  | 1 x full size                              | 1 x full size                              |
| M.2 Steckplätze       | –                              | 1 x M.2 3042/3052 B-Key                    | 1 x M.2 3042/3052 B-Key                    |
| Flash-Speicher        | 32 GB,<br>optional 128 GB eMMC | 256 GB,<br>optional 512 GB und<br>1TB NVMe | 256 GB,<br>optional 512 GB und<br>1TB NVMe |

### Interfaces

| Type             | PR2x.2     | PR4x.2                                                                        | PR5x.2                                                                        |
|------------------|------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Ethernet         | 2 x Gbit   | 2 x 2,5 Gbit<br>1 x Gbit                                                      | 2 x 2,5 Gbit<br>1 x Gbit                                                      |
| USB host         | 2 x USB3.2 | 3 x USB 3.2 G1<br>1 x USB 2.0                                                 | 3 x USB 3.2 G1<br>1 x USB 2.0                                                 |
| Video interface  | 1 x HDMI   | 2 x DisplayPort,<br>optional CDI+<br>LongDistanceVideo 100 m,<br>single cable | 2 x DisplayPort,<br>optional CDI+<br>LongDistanceVideo 100 m,<br>single cable |
| Serial interface | –          | 2 x RS232/422/485                                                             | 2 x RS232/422/485                                                             |

### Electrical data

| Type                   | PR2x.2           | PR4x.2           | PR5x.2           |
|------------------------|------------------|------------------|------------------|
| Input voltage          | 10 - 30 V DC     | 24 V DC          | 24 V DC          |
| Max. power consumption | 35 W             | 44 W             | 95 W             |
| EMC                    | Class A          | Class A          | Class A          |
| RTC buffering          | Internal battery | Internal battery | Internal battery |

[Configurator](#)

[Community](#)

[Contact](#)



The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

### Mechanical tests

| Type                 | PR2x.2 | PR4x.2 | PR5x.2 |
|----------------------|--------|--------|--------|
| Vibration resistance | 2 g    | 2 g    | 2 g    |
| Shock resistance     | 50 g   | 50 g   | 50 g   |

### General data

| Type                                    | PR2x.2                          | PR4x.2                          | PR5x.2                          |
|-----------------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Ambient temperature (operation)         | +0 ... +50 °C                   | +0 ... +55 °C                   | +0 ... +55 °C                   |
| Ambient temperature (storage/transport) | -40 ... +85 °C                  | -40 ... +85 °C                  | -40 ... +85 °C                  |
| Permissible humidity (operation)        | 85 % (at 40 °C, non-condensing) | 85 % (at 40 °C, non-condensing) | 85 % (at 40 °C, non-condensing) |
| Assembly                                | DIN rail                        | Wall assembly                   | Wall assembly                   |
| Cooling                                 | Convection (fanless)            | Convection (fanless)            | Fan                             |
| Degree of protection                    | IP 20                           | IP 20                           | IP 20                           |

[Configurator](#)

[Community](#)

[Contact](#)



The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

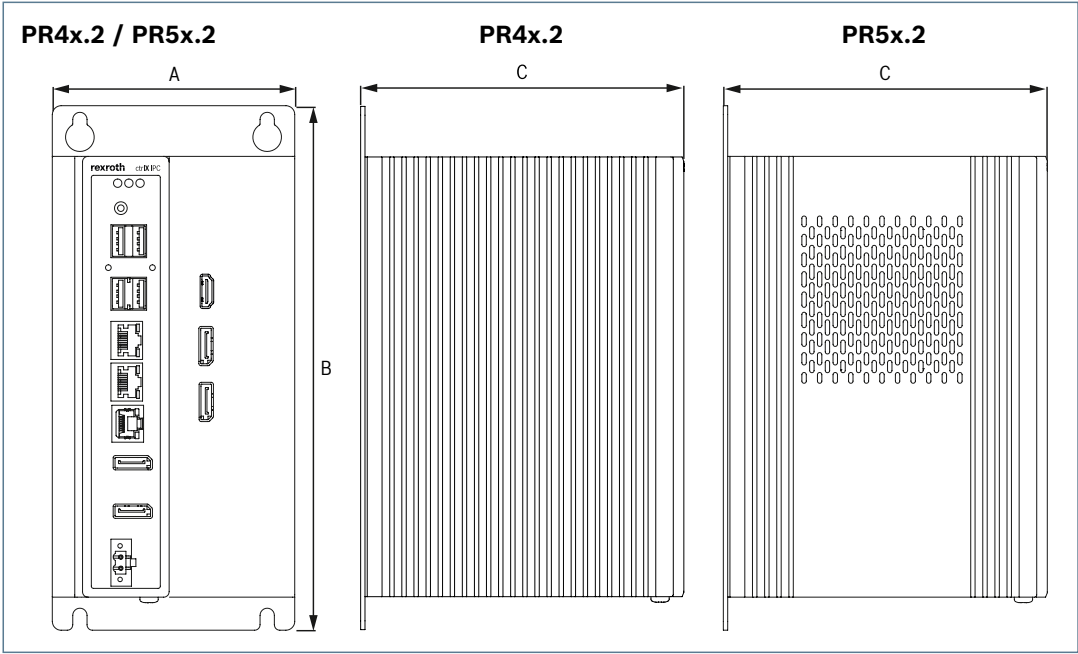


### NVIDIA® Extension

| Type             | PR2x.2 | PR4x.2                                                          | PR5x.2                                                          |
|------------------|--------|-----------------------------------------------------------------|-----------------------------------------------------------------|
| CPU              | -      | Quadro 2000 A @ 35 W                                            | Quadro 2000 A @ 35 X                                            |
| Architecture     |        | NVIDIA® Ada-Lovelance                                           | NVIDIA® Ada-Lovelance                                           |
| RAM              |        | 8 GB GDDR6                                                      | 8 GB GDDR6                                                      |
| CUDA Cores       |        | 3072                                                            | 3072                                                            |
| RT Cores         |        | 24                                                              | 24                                                              |
| Tensor Cores     |        | 96                                                              | 96                                                              |
| FP32 Performance |        | 8.94 TFLOPS                                                     | 8.94 TFLOPS                                                     |
| DisplayPort      | -      | 2x DisplayPort 1.4a, 4 K @ 120 Hz or 8 K @ 60 Hz (requires DSC) | 2x DisplayPort 1.4a, 4 K @ 120 Hz or 8 K @ 60 Hz (eequires DSC) |
| HDMI             |        | 1x HDMI 2.0, 4 K @ 60 Hz                                        |                                                                 |

-  [Configurator](#)
-  [Community](#)
-  [Contact](#)

### Dimensions NVIDIA® Extension



| Typ | PR4x.2 NVIDIA® Extension | PR5x.2 NVIDIA® Extension |
|-----|--------------------------|--------------------------|
| A   | 110 mm                   | 110 mm                   |
| B   | 238 mm                   | 238 mm                   |
| C   | 147 mm                   | 147 mm                   |



The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.