

Frequently Asked Questions



General questions

- Where can I buy the *Millenium*Slim logic controller? How much does it cost?
 You can find stock and the best price for the *Millenium*Slim at your preferred Crouzet authorized partner in the next link: <u>Crouzet Authorized</u>
 Partners
- Does the *Millenium*Slim come pre-programmed?

No, the controller does not have a program when purchased. Use the programming software **CrouzetSoft** (that you can download in the next link: <u>Crouzet Soft</u>) to create and upload your program. Or alternatively look at our library of simple application & product equivalent programs to start your project.

How can I visualize the status of my application if there is no screen on the *Millenium*Slim?

A couple of LEDs in the front face of the product will let you know of current status (The LED operation description can be found in section 6 of our **User Manual** available at the <u>Crouzet's SODA database</u>). You can also visualize the status of your application in real time through your computer or mobile device thanks to the **Crouzet Virtual Display** (CVD) app. For more details about CVD and download link, you can access the dedicated page: <u>Crouzet Virtual Display</u>

• What do the blinking LEDs on the *MilleniumSlim* mean?

There are several actions that the LEDs can indicate. The description of the LEDs operation can be found in section 6 of our **User Manual** available at the <u>Crouzet's SODA database</u>

- How can I do modifications in my application parameters if there are no buttons on the *MilleniumSlim*? You can access the virtual buttons of the *MilleniumSlim* to modify the parameters of your application in real time, through your computer or mobile device thanks to the **Crouzet Virtual Display** (CVD) app. For more details about CVD and download link, please visit the <u>Crouzet Virtual Display</u> home page.
- What are the maximum electrical characteristics of the *Millenium*Slim?
 All the electrical characteristics can be found in our *Datasheet* available at the <u>Crouzet's SODA database</u>
- How can I retrieve a Datalog in *Millenium*Slim?

You can access to the datalog thanks to the **Crouzet Virtual Display** (CVD) app. For more details about how to use CVD, please refer to the <u>Crouzet Virtual Display</u> quick start guide available at the <u>Crouzet's SODA database</u>

• Can I configure alerts with *Millenium*Slim?

MilleniumSlim does not have alert functionality, in order to have this option, you can check at our other controllers:

- Communicating Logic controller MILLENIUM EVO
- Nano-PLC em4_{NANOPLC}
- Telecontroller em4_{ALERT}.

Can I expand the I/Os capabilities of my *MilleniumSlim*? Are there any expansions compatible?

There are no expansions compatible for *MilleniumSlim*, but it is possible to have more I/Os by adding other *MilleniumSlim* logic controllers wirelessly in a "daisy-chain" configuration as master-slave. In order to have more I/Os for simple applications check at our other controllers of the *Millenium* family:

- Logic Controller Millenium3
- Communicating Logic Controller MILLENIUM EVO

Installation questions

- Where can I find the user manual for the *Millenium*Slim? The User Manual of *Millenium*Slim can be found in the <u>Crouzet's SODA database</u>
- How do I install my *Millenium*Slim? The installation instructions can be found in section 3 of our *User Manual* available at the <u>Crouzet's SODA database</u>
- What type of devices can I connect to the inputs of the *Millenium*Slim?
 *Millenium*Slim has flexible configurable inputs (digital, analog voltage, high-speed, PWM) which are compatible with a variety of industrial devices (contacts, buttons, switches, sensors, potentiometers, probes, encoders, etc.). For more details about the input capabilities, please refer to pages 9 and 10 of the *Datasheet*. You can find the datasheet within the Crouzet's SODA database
- What are the maximum cable sizes that I can use for the connections of MilleniumSlim?
 There are several sizes depending of the cables to use. The consideration of the connections characteristics can be found in section 8 of our User Manual available at the Crouzet's SODA database

Connectivity questions

- How can I transfer a program to *Millenium*Slim? You can transfer your program to your *Millenium*Slim via Bluetooth, using our <u>programming software CrouzetSoft</u> or our <u>app Crouzet</u> <u>Virtual Display</u>
- Can I exchange data between different logic controllers *Millenium*Slim?
 Yes, it is possible to establish connection between 2 *Millenium*Slim via Bluetooth, in a master-slave configuration, so they can exchange data.
- What happens if two logic controllers *Millenium*Slim that are communicating lose the connection? Is there any risk for my application?

As with any wireless technology, its use is recommended in non-critical applications in terms of cycle time and response time, to avid any risk if communication is lost. We will notice that the *MilleniumSlim* lost connection when the Bluetooth LED stays in steady blue color instead of continuously blinking. It is possible to program in the master *MilleniumSlim* a specific routine when connection is lost, thanks to a status function block that allows to know when a slave do not respond.

- How much data can be transferred between two *MilleniumSlim* communicating via Bluetooth? 1 master can read 4 words of 16 bits and write 4 words of 16 bits to a slave.
- How many *Millenium*Slim can be connected in a chain? There is no limit of products that can be connected in a chain.
- What is the maximum distance expected between *Millenium*Slim controllers to be able to communicate? 20m in open space and 2m inside a metal cabinet
- Can I exchange data between *Millenium*Slim and other Crouzet controllers?
 It is not possible to communicate between *Millenium*Slim and other Crouzet controllers.

• Can I use Modbus RTU with MilleniumSlim?

There are no Modbus RTU communication capabilities in *MilleniumSlim*, if you require Modbus RTU communication you can check at our other controllers:

- Logic Controller Millenium3
- <u>Communicating Logic Controller MILLENIUM EVO</u>
- Nano-PLC em4_{NANOPLC}
- Telecontroller **em4**ALERT
- Can I use Ethernet (Modbus TCP/IP) with *Millenium*Slim?

There are no Ethernet (Modbus TCP/IP) communication capabilities in *MilleniumSlim*, if you require Ethernet (Modbus TCP/IP) communication you can check at our other controllers:

- Logic Controller Millenium3
- <u>Communicating Logic Controller MILLENIUM EVO</u>
- Nano-PLC em4_{NANOPLC}
- The computer does not recognize the MilleniumSlim
 - Check the electrical connections.

- Check that your computer is compatible with Bluetooth Low Energy (BLE). Otherwise connect the USB dongle (Part Number: 88980124)
- Check your Controller choice in the programming software. Go to "Controller" menu and select "Choose the type of controller..." Then
 choose the right Controller using the part number reference of the one you are using. Select the correct one and click on "Next" until
 you return to the programming window.
 NOTE: When you change the type of your controller, please check your programing sheet again. The change can bring differences
 on the inputs and outputs.

Software questions

Is the software of MilleniumSlim the same as all other Millenium controllers?

MilleniumSlim uses the programming software CrouzetSoft, it is the same software as for the next controllers:

- Communicating Logic Controller MILLENIUM EVO
- Nano-PLC em4_{NANOPLC}
- Telecontroller em4_{ALERT}.

Just note that is <u>NOT</u> the same software for the <u>Logic Controller</u> *Millenium3*, this controller uses the programming software *Millenium3soft*

• Is the software of *MilleniumSlim* free or there is a cost?

All the programming software of Crouzet, is completely free. You can program, simulate, and have all functionality at no cost.

- Is there a license limit in the users of the programming software of *Millenium*Slim? There are no licenses or limits in the quantity of users or computers that can use the programming software of Crouzet. You can program, simulate, and have all functionality at no cost.
- Where can I find the programming software of *Millenium*Slim?
 MilleniumSlim uses the programming software **CrouzetSoft**, that you can download in the next link: Crouzet Soft
- Can I use programs made for other Crouzet controllers (em4 or other *Millenium*) with *Millenium*Slim and vice versa?

Yes, it is possible to import and use a program made in any of the next controllers:

- Logic Controller Millenium3
- <u>Communicating Logic Controller MILLENIUM EVO</u>
- Nano-PLC em4_{NANOPLC}
- Telecontroller em4_{ALERT.}

To do so, you just need to open the pm3, pm4, mevo or cps file on the *Millenium*Slim programming software **CrouzetSoft**. Just note that you need to check your programing sheet again. To import a program from other controller can bring differences on the inputs and outputs, so you will probably need to adapt your program.

- With which version of Windows is compatible the programming software of *MilleniumSlim* CrouzetSoft? The software is compatible with Windows 10 and Windows 7
- Is the programming software of *Millenium*Slim CrouzetSoft compatible with iOS operating systems?

No, the programming software of *MilleniumSlim* CrouzetSoft is not compatible with IOs operating systems. The software is compatible with Windows 10 and Windows 7

Is the programming software of *MilleniumSlim* CrouzetSoft compatible with Linux or other open-source operating systems?

No, the programming software of *Millenium*Slim CrouzetSoft is not compatible with linux or other open-source operating systems. The software is compatible with Windows 10 and Windows 7

• Where can you find Help on the use of the programming software of *MilleniumSlim*?

You can get help on your program Software in several ways. The software has two icons on the standard Toolbar that allow you to access the Controller Online Help. You can also find information directly on the different function blocks. When you put on your mouse on the function blocks inputs/outputs, a feature appears. This feature is explained in the function block Help.

Virtual Display questions

• What does CVD mean?

CVD stands for **Crouzet Virtual Display**, the free app that allows you to access your Crouzet controller screen and control buttons at a distance in real-time and change available parameters from any of your pc's or mobile devices. For more information about **Crouzet Virtual Display** please visit the dedicated page here: <u>Crouzet Virtual Display</u>

How can I connect my *Millenium*Slim to CVD (Crouzet Virtual Display)?

For instructions on how to connect and use **Crouzet Virtual Display** please refer to the **Crouzet Virtual Display user manual** available at the <u>Crouzet's SODA database</u>

How can I transfer data with CVD (Crouzet Virtual Display) to my MilleniumSlim?

For instructions on how to transfer data and use **Crouzet Virtual Display** please refer to the **Crouzet Virtual Display user manual** available at the <u>Crouzet's SODA database</u>

• Why can't I access the parameters menu in CVD (**Crouzet Virtual Display**) while connected to my *Millenium*Slim?

The parameters menu in Crouzet Virtual Display is not available in MilleniumSlim