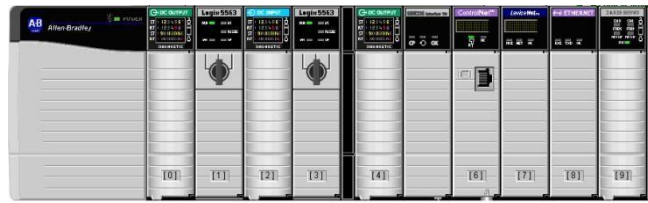


An Overview of the different Logix5000 Platforms

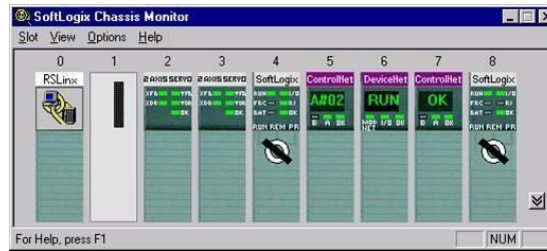


ControlLogix is the largest platform in the logix5000 stable. It consists of a chassis which can vary in size depending on application requirements. The chassis sizes start at 4 slot right up to 17 slot. What is unique about controllogix, is that it is a **Multi Controller System**. This means that more than one controller can be used in the same chassis running different projects.

Another unique feature is the fact that the modules can be placed in **any slot**. Modules and controllers are not slot dependent. Also, modules can be removed and inserted under power, known as **RIUP**. Perfect for large projects stand alone or networked.



CompactLogix is the platform shown above. This is ideal for small to medium projects also stand alone or networked. This platform does not have a chassis. The modules are rail mounted and plug into each other from the side. Very easy to install and replace. This is used extensively throughout industry.



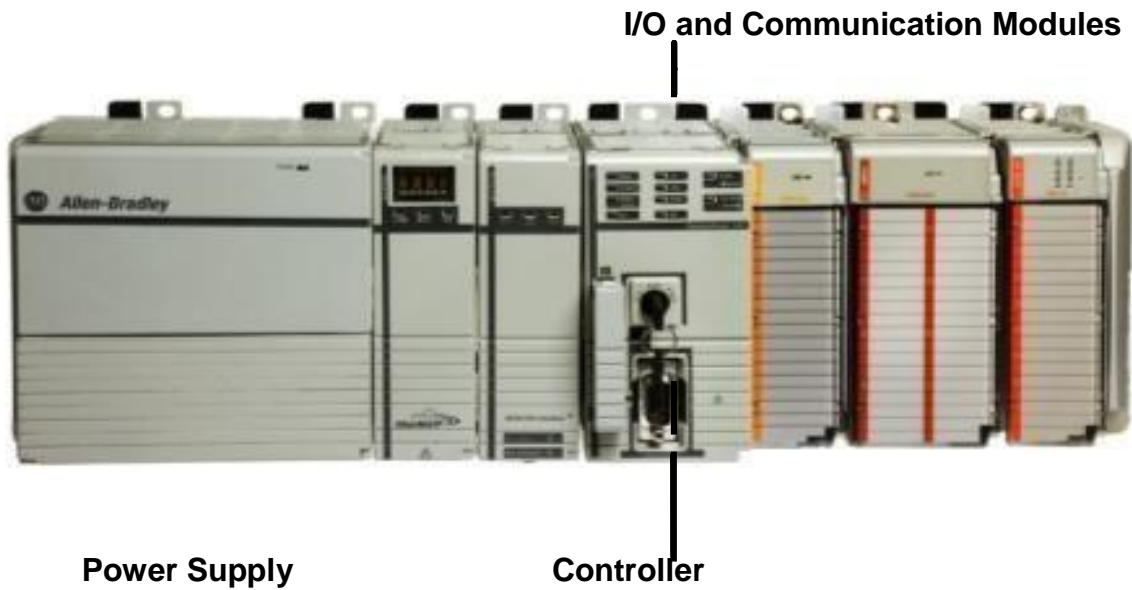
Softlogix is the platform shown above. This is installed on a computer. It operates just like a controllogix controller. You cannot install I/O modules directly into this chassis, but you can install communication modules to go across a network to operate I/O in a remote chassis and can in fact control a plant. If this is done, it is advisable to have a backup computer in case of failure.



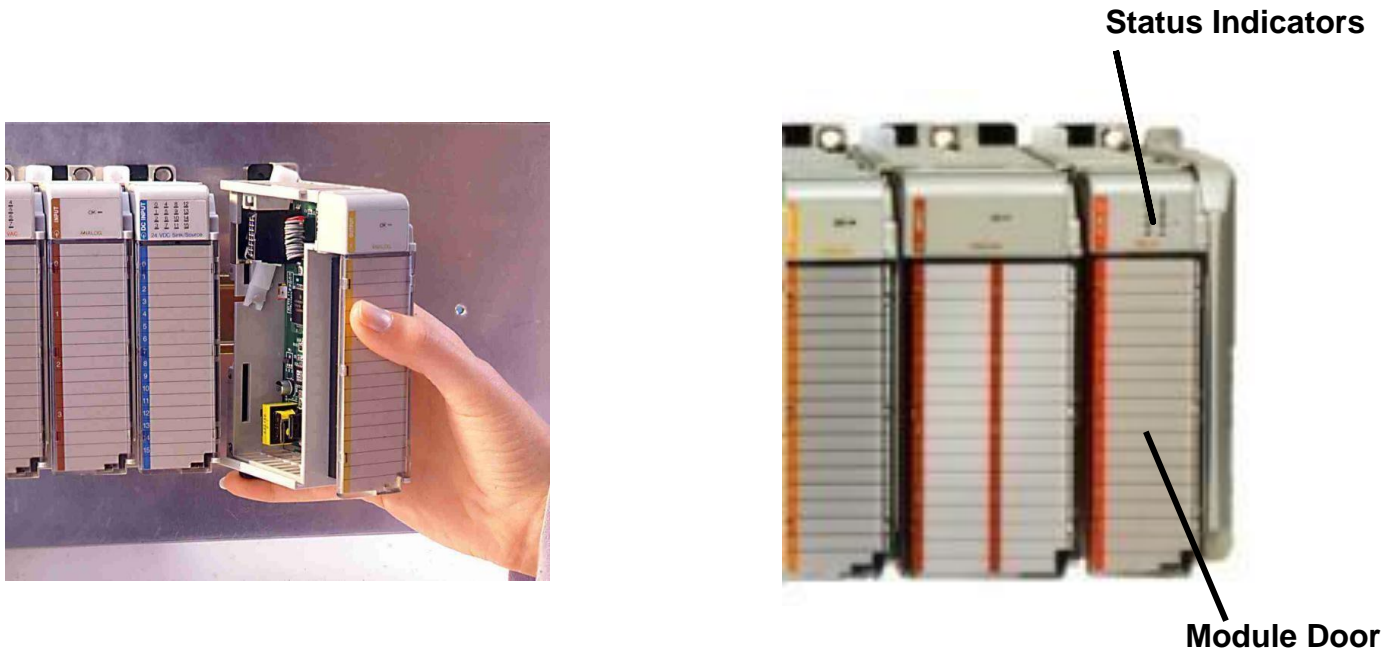
The controller shown above is **Drivelogix**. This is a **Powerflex Drive** with an embedded controller. It can use embedded parameters within the drive to configure a specific method of operation to suit the plant requirements.

With all the above platforms, it is important to note that the **Logix5000 software is exactly the same** and all can be configured in a similar manner so there is nothing different or additional that is required so if you switch from one platform to another, you use exactly the same software. The only thing that will be different from a programming point of view, is configuring the I/O. This is accommodated in the software.

Logix5000 Hardware Components

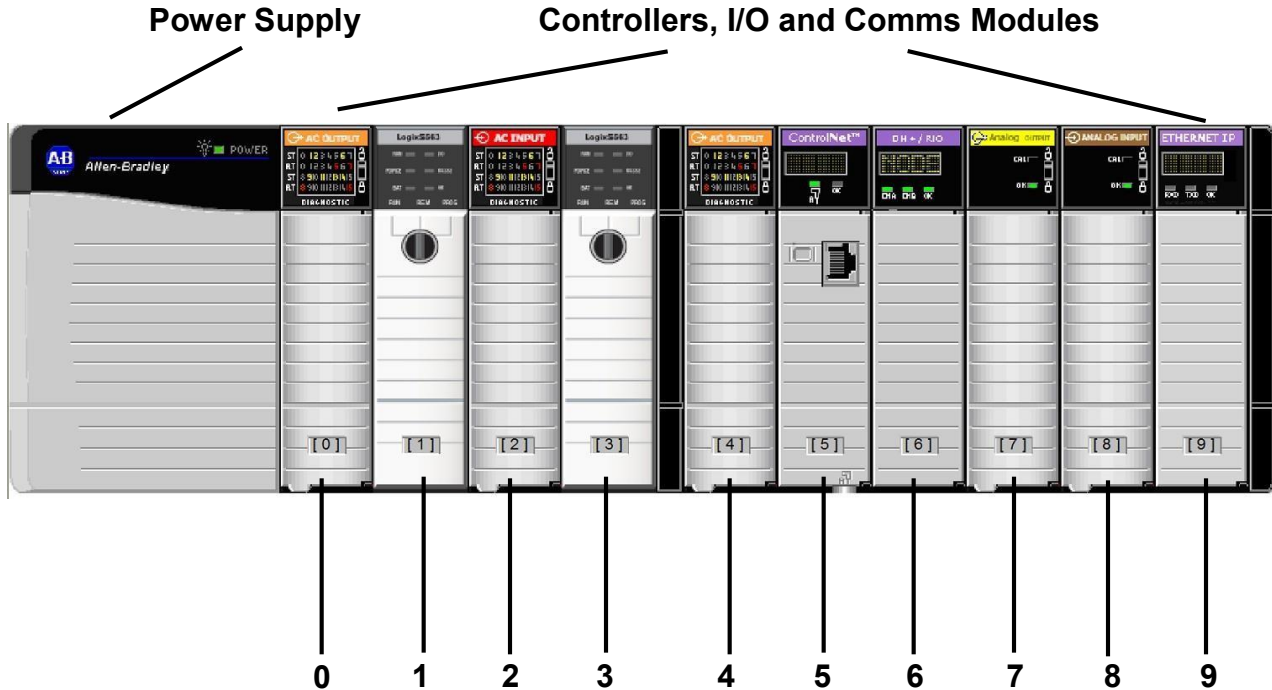


The diagram shown above, illustrates a typical layout of a compactlogix system



The diagram on the left shows how the modules connect with each other. It is a **Multipin Plug Socket** arrangement which are connected and disconnected by sliding the white lever across in the required direction. The diagram on the right shows the location of any status indicators and the Module door location where applicable.

The compactlogix system has memory sizes from 512 Kbytes to 2 Mbytes. It supports all the networks in the **Netlinx Strategy**. These are **Controlnet**, **Devicenet** and **Ethernet/IP**.

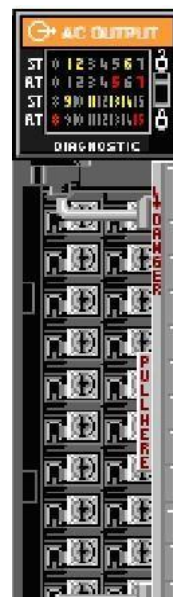


Chassis Slots are numbered left to right always starting at 0 regardless of chassis size

The **Controllogix System** consists of a slotted chassis where the modules reside. They are plugged into an electronic backplane which distributes power and communication to all the modules in the chassis. This is in fact a local network known as the **Controlbus**. Network bridging is made possible through this.

Chassis Sizes: 4 slot, 7 slot, 10 slot, 13 slot and 17 slot. This gives plenty of choices for different plant requirements.

The I/O Modules are not connected directly to the field devices. This allows a module to be replaced without disconnecting any I/O wiring. The wiring is connected to a **Removable Terminal Block** known as an **RTB**. The illustration on the right shows an RTB for a digital module. It is very similar for an analog module.



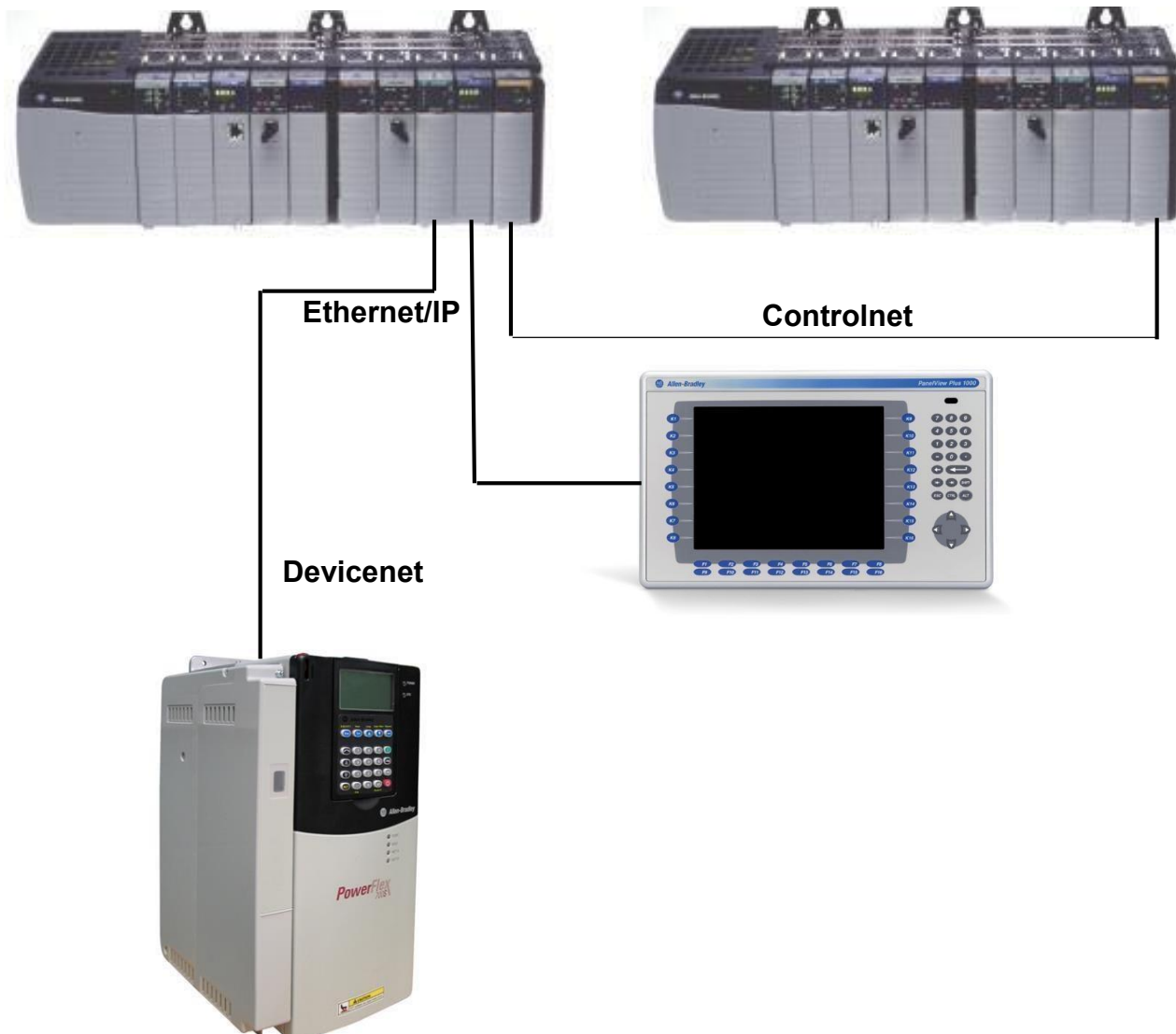
Controllogix Communication Modules consist of the following.

- **Ethernet/IP**
- **Controlnet**
- **Devicenet**

The above networks comprise the netlinx strategy previously mentioned.

- **Data Highway Plus and DH485**
- **Remote I/O**

The above networks are still used particularly on earlier systems. They are gradually being replaced with the faster networks of today. These are known as **Legacy Networks**.



With the communication modules in the same backplane, network bridging takes place and all the networks can communicate with each other