[SimplIQ Line](http://www.elmomc.com/members/NetHelp/simpliqline.htm) / [SimplIQ Command Reference](http://www.elmomc.com/members/NetHelp/simpliqcommandrefere.htm) / [Alphabetical Listing](http://www.elmomc.com/members/NetHelp/alphabeticallisting.htm) / [IP – Input Port](http://www.elmomc.com/members/NetHelp/ipinputport1.htm)

**IP – Input Port**

**Purpose:**  
Reports an active or non-active state of a digital input. A digital input is considered to be *active* when the associated function is logically active. The functionality and logic levels are defined in the IL[N] command.

IP logic is always positive. When the digital input is *active*, the relevant IP bit is set.

The report is a bit-field, defined in the following table:

| **Bit** | **Description** | **Associated Function in IL[N] Command** |
| --- | --- | --- |
| 0 | General purpose input 1 is active | 3 |
| 1 | General purpose input 2 is active | 3 |
| 2 | General purpose input 3 is active | 3 |
| 3 | General purpose input 4 is active | 3 |
| 4 | General purpose input 5 is active | 3 |
| 5 | General purpose input 6 is active | 3 |
| 6 | Main home switch | 8 |
| 7 | Auxiliary home switch | 9 |
| 8 | Soft stop | 7, 10 |
| 9 | Hard stop | 1, 10 |
| 10 | Forward Limit (FLS) | 5 |
| 11 | Reverse Limit (RLS) | 4 |
| 12 | INH (Enable) switch | 0 |
| 13 | Hardware BG | 6 |
| 14 | Abort function | 11 |
| 15 | Not used; always 0 |  |
| 16 | Digital input 1 logical pin state |  |
| 17 | Digital input 2 logical pin state |  |
| 18 | Digital input 3 logical pin state |  |
| 19 | Digital input 4 logical pin state |  |
| 20 | Digital input 5 logical pin state |  |
| 21 | Digital input 6 logical pin state |  |
| 22 | Digital input 7 logical pin state |  |
| 23 | Digital input 8 logical pin state |  |
| 24 | Digital input 9 logical pin state |  |
| 25 | Digital input 10 logical pin state |  |
| 26 to 31 | Reserved; always 0 |  |

**Table 26: IP - Input Port**

**Notes:**

•Each type of Elmo drive supports a different number of digital inputs. Please consult the drive’s *Installation Guide* for more information about its inputs.

•For compatibility reason inputs 7-10 do not have an indication for the “General Purpose” function and cannot be used for user program AUTO routine as well. Bits 22-25 will still be set regardless to the above.

•The logical state of digital input pins 1 to 10 — as indicated in bits 16 to 25 — is reflected in the logic level required in the relevant IL[1] to [10], respectively. IB[N] may be more convenient than IP for user program decisions and branching. However, it is not recommended for the synchronized reading of several input bits. If such a reading is needed, use the IP command.

**Attributes:**                   **Type:**                                          Status report, Integer  
**Source:**                                      Program, RS-232, CANopen  
**Restrictions:**                            None  
**Unit modes:**                            All

**See also:**  
IB[N], IL[N]

Links:

[JV – Jogging Velocity](http://www.elmomc.com/members/NetHelp/jvjoggingvelocity.htm)