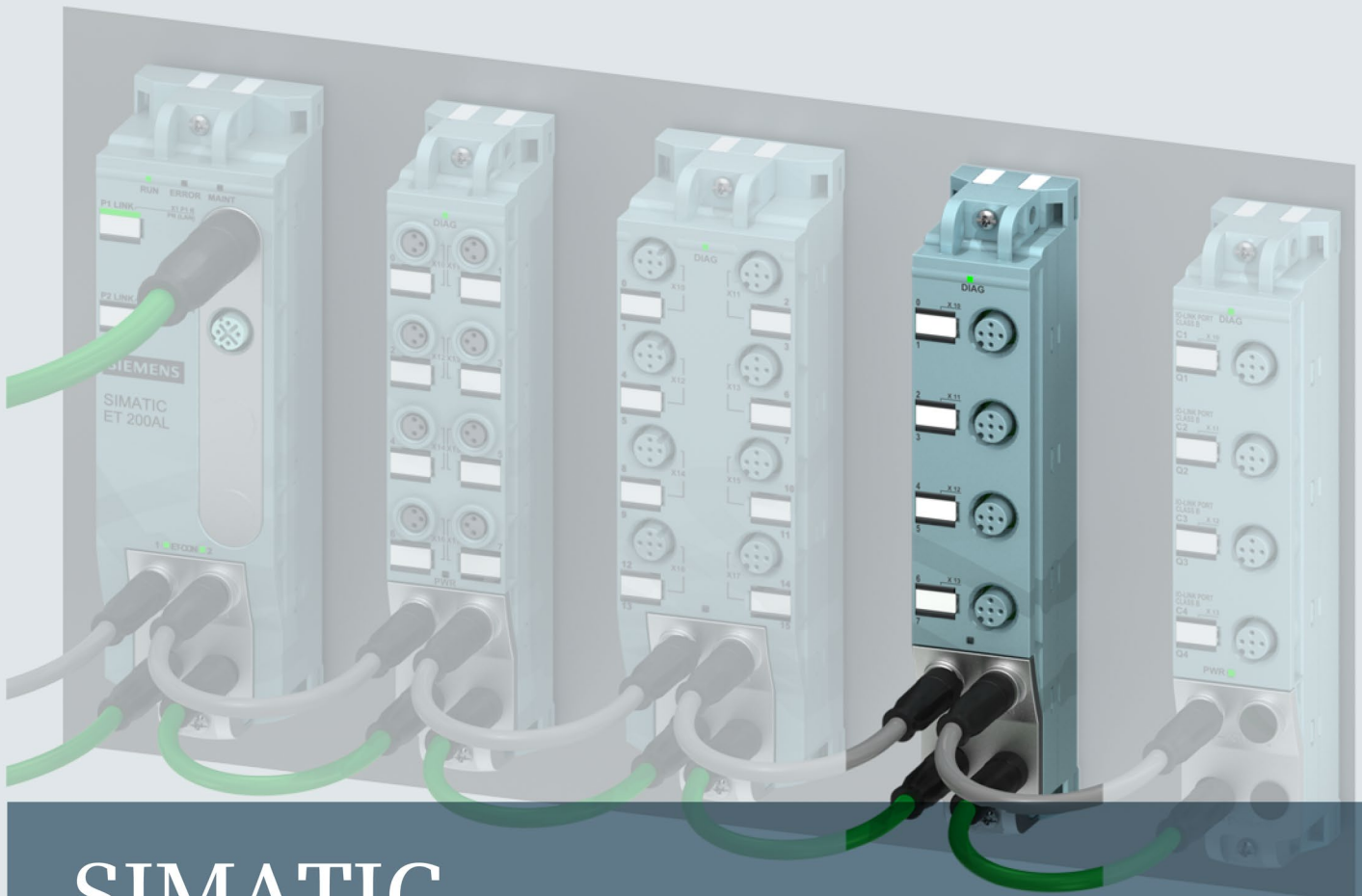


**SIEMENS**



# SIMATIC

## ET 200AL

Digital input module DI 8x24VDC 4xM12 (6ES7141-5AF00-0BA0)

Manual

Edition

02/2016

Answers for industry.

## SIMATIC

ET 200AL  
Digital input module  
DI 8x24VDC 4xM12  
(6ES7141-5AF00-0BA0)

Manual

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## Legal information

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# Preface

## Preface

### Purpose of the documentation

This manual supplements the ET 200AL distributed I/O system (<https://support.industry.siemens.com/cs/us/en/view/89254965>) system manual. Functions that are generally applicable to the ET 200AL distributed I/O system are described there.

The information provided in the present manual, the system manual and the function manuals enables you to commission the ET 200AL distributed I/O system.

### Conventions

Please also observe notes marked as follows:

---

#### Note

Indicates important product information to which particular attention should be paid.

---

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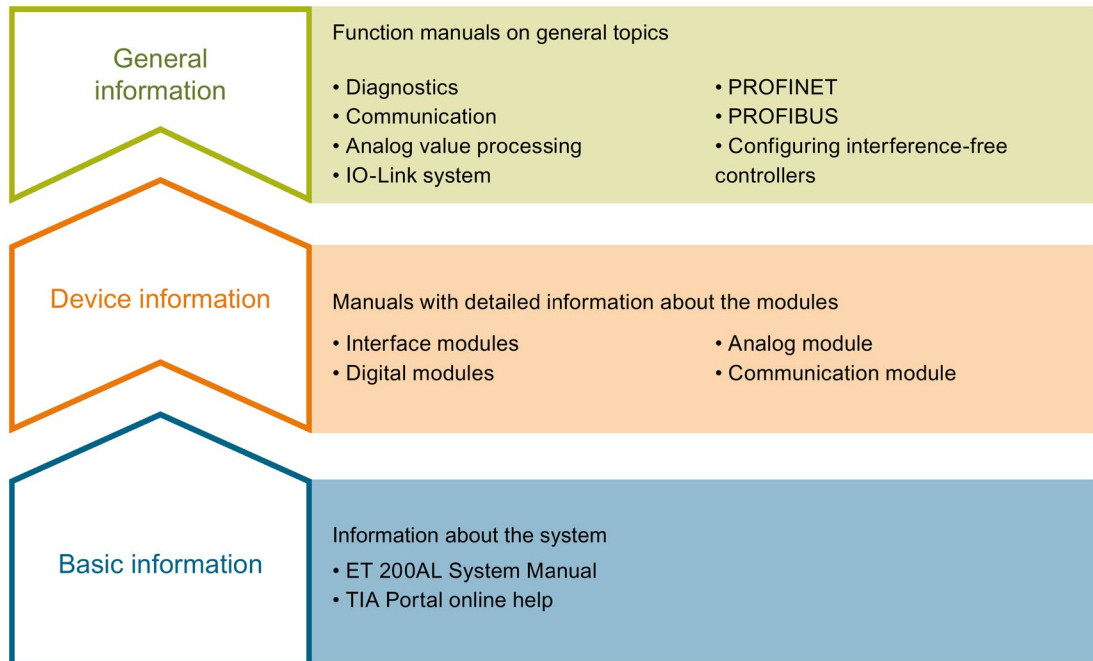
To stay informed about product updates as they occur, sign up for a product-specific newsletter. You can find more information on the Internet (<http://support.automation.siemens.com>).

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The documentation for the SIMATIC ET 200AL distributed I/O system is arranged into three areas.

This arrangement enables you to access the specific content you require.



## Basic information

The System Manual and Getting Started describe in detail the configuration, installation, wiring and commissioning of the SIMATIC ET 200AL distributed I/O system. The STEP 7 online help supports you in the configuration and programming.

## Device information

Product manuals contain a compact description of the module-specific information, such as properties, terminal diagrams, characteristics and technical specifications.

## General information

The function manuals contain detailed descriptions on general topics regarding the SIMATIC ET 200AL distributed I/O system, e.g. diagnostics, communication, Motion Control, Web server.

You can download the documentation free of charge from the Internet (<http://w3.siemens.com/mcims/industrial-automation-systems-simatic/en/manual-overview/tech-doc-et200/Pages/Default.aspx>).

## Manual Collection ET 200AL

The Manual Collection contains the complete documentation on the SIMATIC ET 200AL distributed I/O system gathered together in one file.

You can find the Manual Collection on the Internet  
(<http://support.automation.siemens.com/WW/view/en/95242965>).

## "mySupport"

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## "mySupport" - Documentation

In the Documentation area in "mySupport" you can combine entire manuals or only parts of these to your own manual.

You can export the manual as PDF file or in a format that can be edited later.

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## "mySupport" - CAx data

In the CAx data area in "mySupport", you can access the current product data for your CAx or CAe system.

You configure your own download package with a few clicks.

In doing so you can select:

- Product images, 2D dimension drawings, 3D models, internal circuit diagrams, EPLAN macro files
- Manuals, characteristics, operating manuals, certificates
- Product master data

You can find "mySupport" - CAx data on the Internet  
(<http://support.industry.siemens.com/my/ww/en/CAxOnline>).

## Application examples

The application examples support you with various tools and examples for solving your automation tasks. Solutions are shown in interplay with multiple components in the system - separated from the focus on individual products.

You will find the application examples on the Internet  
(<https://support.industry.siemens.com/sc/ww/en/sc/2054>).

## **TIA Selection Tool**

With the TIA Selection Tool, you can select, configure and order devices for Totally Integrated Automation (TIA).

This tool is the successor of the SIMATIC Selection Tool and combines the known configurators for automation technology into one tool.

With the TIA Selection Tool, you can generate a complete order list from your product selection or product configuration.

You can find the TIA Selection Tool on the Internet

(<http://w3.siemens.com/mcms/topics/en/simatic/tia-selection-tool>).

## Product overview

### 2.1 Properties

#### Article number

6ES7141-5AF00-0BA0

#### View of the module

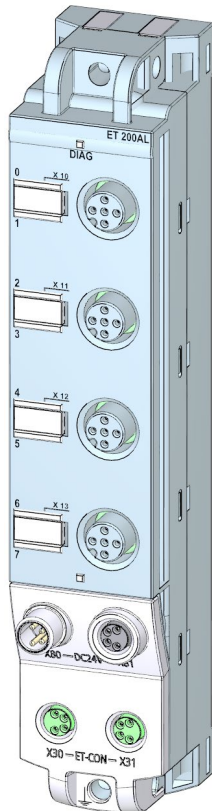


Image 2-1 View of the DI 8x24VDC 4xM12 digital input module

## Properties

The module has the following technical properties:

- 8 digital inputs
- M12 sockets for connection of sensors
- 24 V DC supply voltage
- Configurable diagnostics can be set for each module
- Typical input delay of 3 ms
- Suitable for switches and proximity switches
- Dimensions 30 x 159 mm

The module supports the following functions:

- Firmware update
- Identification and maintenance data I&M0 to I&M3
- Value status (Quality Information)
- PROFIenergy

## Accessories

The following components are included in the module package:

- Identification labels
- Spacers

## Other components

The following component can be ordered as spare part:

- Identification labels

The following components can be ordered as accessories:

- Connectors
- Cables
- Stripping Tool for ET-Connection
- M8 sealing cap
- M12 sealing cap

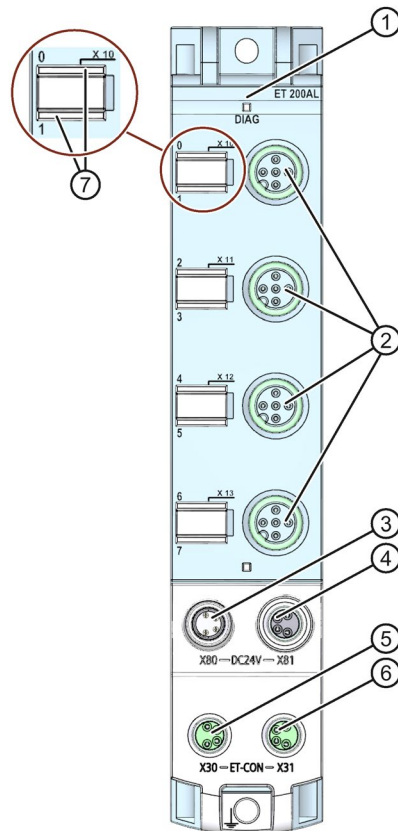
## See also

You can find more information on accessories in the Accessories/spare parts section of the ET 200AL distributed I/O system

(<https://support.industry.siemens.com/cs/us/en/view/89254965>) system manual.

## 2.2 Operator controls and display elements

The figure below shows the operator controls and display elements of the DI 8x24VDC 4xM12 digital input module.



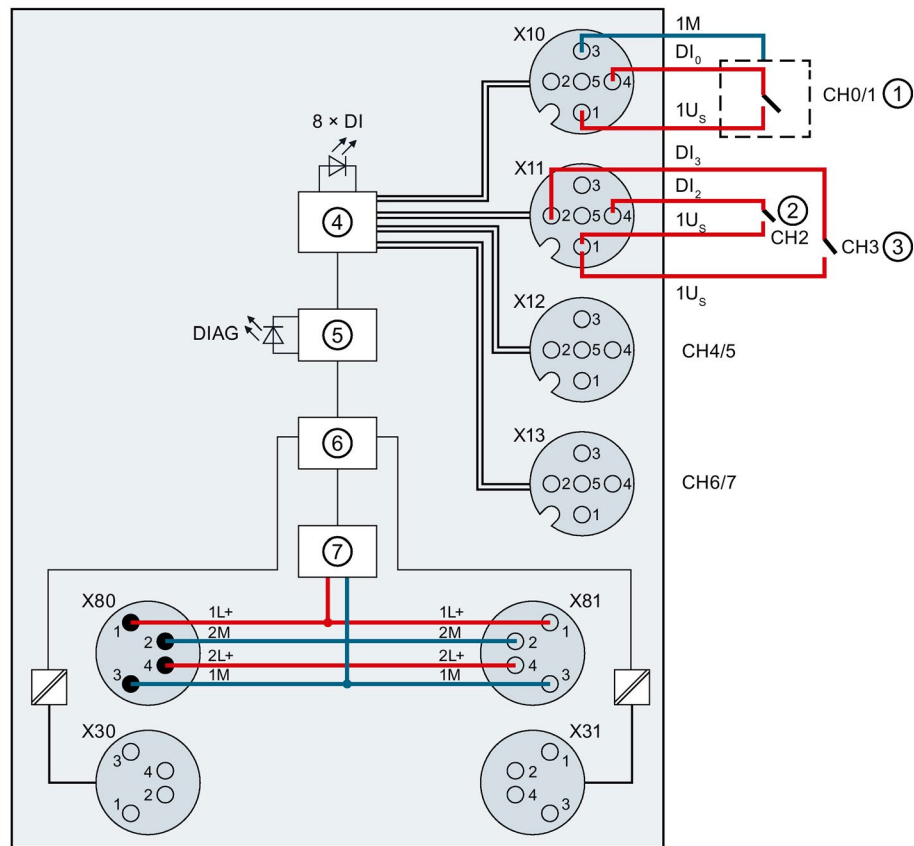
- ① DIAG: LED display for the diagnostic status
- ② X10 to X13: Sockets for the input signal
- ③ X80: Connector for infeed of the supply voltage (POWER input)
- ④ X81: Socket for loop-through of the supply voltage (POWER output)
- ⑤ X30: Socket for ET-Connection IN
- ⑥ X31: Socket for ET-Connection OUT
- ⑦ LED displays 0 to 7 for the channel status

Image 2-2 Operator controls and display elements

# Wiring

## 3.1 Terminal and block diagram

The figure below shows an example of the pin assignment of signal inputs with 2-wire and 3-wire connection.



|            |                                 |                 |                                      |
|------------|---------------------------------|-----------------|--------------------------------------|
| ①          | 3-wire connection               | X30             | Infeed of the ET-Connection          |
| ②          | 2-wire connection               | X31             | Loop-through of the ET-Connection    |
| ③          | 2-wire connection               | 1L+             | Supply voltage 1L+ (non-switched)    |
| ④          | DI circuit                      | 1M              | Ground 1M (non-switched)             |
| ⑤          | Microcontroller                 | 2L+             | Load voltage 2L+ (switched)          |
| ⑥          | ET-Connection interface         | 2M              | Ground 2M (switched)                 |
| ⑦          | Internal supply voltage         | 1Us             | 24 V encoder supply                  |
| X10 to X13 | Channels 0 to 7                 | DI <sub>n</sub> | Input signal                         |
| X80        | Infeed of supply voltages       | DI              | Channel status LEDs (0 to 7) (green) |
| X81        | Loop-through of supply voltages | DIAG            | LED diagnostic status (red/green)    |

Image 3-1 Terminal and block diagram

## 3.2 Pin assignment

### Note

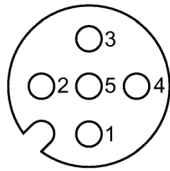
Color coding

The sockets for ET-Connection and the power supply of the modules are color-coded. These colors correspond to the colors of the offered cables.

### Pin assignment of the sockets for digital inputs

The table below shows the pin assignment of the 4 sockets for the connection of digital inputs.

Table 3- 1 Pin assignment for digital inputs

| Pin                                          | Assignment                                                                                                                                                                                   | Front view of the sockets                                                            |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>X10 to X13 sockets for digital inputs</b> |                                                                                                                                                                                              |                                                                                      |
| 1                                            | 24 V encoder supply 1Us<br>(derived from 1L+ non-switched)                                                                                                                                   |  |
| 2                                            | Input signal DI <sub>1</sub> : Connector X10<br>Input signal DI <sub>3</sub> : Connector X11<br>Input signal DI <sub>5</sub> : Connector X12<br>Input signal DI <sub>7</sub> : Connector X13 |                                                                                      |
| 3                                            | Encoder supply ground 1M                                                                                                                                                                     |                                                                                      |
| 4                                            | Input signal DI <sub>0</sub> : Connector X10<br>Input signal DI <sub>2</sub> : Connector X11<br>Input signal DI <sub>4</sub> : Connector X12<br>Input signal DI <sub>6</sub> : Connector X13 |                                                                                      |
| 5                                            | Functional earth FE                                                                                                                                                                          |                                                                                      |

### NOTICE

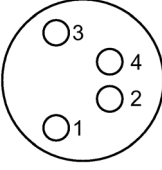
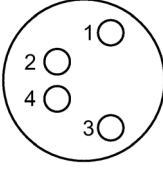
#### 24 V encoder supply 1Us

Use only the 24 V encoder supply 1Us provided by the digital input module to supply power to the encoder.

### Pin assignment of the sockets for ET-Connection

The table below shows the pin assignments of the 2 sockets for the connection of ET-Connection.

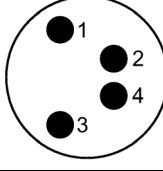
Table 3- 2 Pin assignment for ET-Connection

| Pin       | Assignment                    |                                | Assignment of the wire color of the bus line cable for ET-Connection | Front view of the sockets                                                           |                                                                                     |
|-----------|-------------------------------|--------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           | X30 socket (ET-Connection IN) | X31 socket (ET-Connection OUT) |                                                                      | X30                                                                                 | X31                                                                                 |
| 1         | TXP                           | RXP                            | Yellow                                                               |  |  |
| 2         | RXP                           | TXP                            | White                                                                |                                                                                     |                                                                                     |
| 3         | RXN                           | TXN                            | Blue                                                                 |                                                                                     |                                                                                     |
| 4         | TXN                           | RXN                            | Orange                                                               |                                                                                     |                                                                                     |
| Shielding | Functional earth FE           |                                | -                                                                    |                                                                                     |                                                                                     |

### Pin assignment of the connector for infeed of the supply voltage

The table below shows the pin assignment of the connector for infeed of the supply voltage.

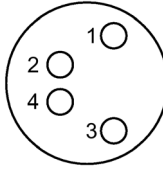
Table 3- 3 Pin assignment of the supply voltage connector

| Pin | Assignment                        | Assignment of the wire color of the power line cable | Front view of the connector                                                           |
|-----|-----------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------|
|     | X80 connector (POWER input)       |                                                      |                                                                                       |
| 1   | Supply voltage 1L+ (non-switched) | Brown                                                |  |
| 2   | Ground 2M (switched)              | White                                                |                                                                                       |
| 3   | Ground 1M (non-switched)          | Blue                                                 |                                                                                       |
| 4   | Load voltage 2L+ (switched)       | Black                                                |                                                                                       |

### Pin assignment of the socket for loop-through of the supply voltage

The table below shows the pin assignment of the socket for loop-through of the supply voltage.

Table 3- 4 Pin assignment of the supply voltage socket

| Pin | Assignment                        | Assignment of the wire color of the power line cable | Front view of the socket                                                              |
|-----|-----------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------|
|     | X81 socket (POWER output)         |                                                      |                                                                                       |
| 1   | Supply voltage 1L+ (non-switched) | Brown                                                |  |
| 2   | Ground 2M (switched)              | White                                                |                                                                                       |
| 3   | Ground 1M (non-switched)          | Blue                                                 |                                                                                       |
| 4   | Load voltage 2L+ (switched)       | Black                                                |                                                                                       |

**NOTICE****ET-Connection/supply voltage**

Observe the correct wiring of the M8 sockets for ET-Connection and the supply voltage.

Mixing up the ET-Connection connectors and the connectors for the supply voltage can destroy the module.

## Parameters/address space

### 4.1 Parameters

The table below shows the parameters for the DI 8x24VDC 4xM12 digital input module.

Table 4- 1 Parameters

| Parameters                           | Value range                                                               | Default | Scope  |
|--------------------------------------|---------------------------------------------------------------------------|---------|--------|
| Diagnostics: Short-circuit to ground | <ul style="list-style-type: none"> <li>Disable</li> <li>Enable</li> </ul> | Disable | Module |

### 4.2 Explanation of the parameters

#### Diagnostics: Short-circuit to ground

Enabling of the diagnostics if a short-circuit of the encoder supply to ground occurs.

### 4.3 Address space

The figure below shows the assignment of the address space for the digital input module DI 8x24VDC 4xM12 with value status (Quality Information, QI).

The address space for the value status is allocated by the module, if the value status is configured using the PROFINET interface module.

Assignment in the process image input (PII)

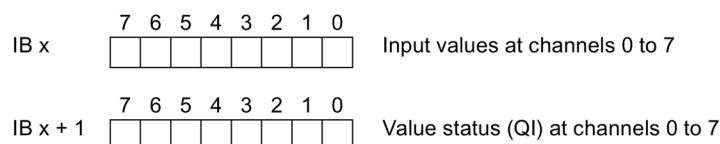


Image 4-1 Address space

#### Configuration options of the DI 8x24VDC 4xM12 digital input module

You have the following configuration options:

- Configuration 1: without value status
- Configuration 2: with value status

#### Evaluating the value status

An additional byte is occupied in the input address space if you enable the value status for the digital input module. Bits 0 to 7 in this byte are assigned to a channel and return information about the validity of the digital input value.

Bit = 1: No error on channel.

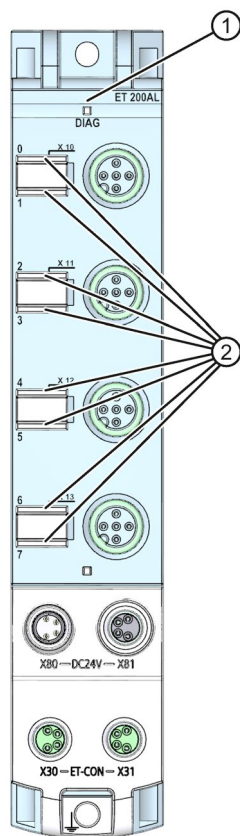
Bit = 0: Error on channel.

## Interrupts/diagnostic alarms

### 5.1 Status and error displays

#### LED displays

The figure below shows the LED displays (status and error displays) of the DI 8x24VDC 4xM12 digital input module.



- ① Diagnostic status (DIAG) (red/green)
- ② Channel status (0 to 7) (green)

Image 5-1 LED displays

## Meaning of the LEDs

The following tables set out the meaning of the status and error displays. Remedial measures for diagnostic alarms can be found in section Diagnostics alarms (Page 19).

### DIAG LED

Table 5- 1 Error display of the DIAG LED

| DIAG LED                                                                                     | Meaning                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>Off     | No supply voltage 1L+                                                                                                                                                                               |
| <br>Flashes | <ul style="list-style-type: none"> <li>Module parameters not assigned</li> <li>Loading firmware<br/>(while the firmware update is being performed, all LEDs retain their current status)</li> </ul> |
| <br>On      | Module parameters assigned and no module diagnostics                                                                                                                                                |
| <br>Flashes | Module parameters assigned and module diagnostics                                                                                                                                                   |

### LED channel status

Table 5- 2 LED channel status display

| LED channel status                                                                         | Meaning            |
|--------------------------------------------------------------------------------------------|--------------------|
| <br>Off | Process signal = 0 |
| <br>On  | Process signal = 1 |

## 5.2 Interrupts

The DI 8x24VDC 4xM12 digital input module supports diagnostic interrupts.

### Diagnostic interrupt

The digital input module generates a diagnostic interrupt at the following events:

- Short-circuit of encoder supply to ground

## 5.3 Diagnostics alarms

For each diagnostic event, a diagnostics alarm is issued and the DIAG LED flashes red on the digital input module. You can read out the diagnostics alarms, for example, in the diagnostics buffer of the CPU. You can evaluate the error codes with the user program.

Table 5- 3 Diagnostics alarms, their meanings and corrective measures

| Diagnostics alarm | Error code     | Meaning                                | Remedy                      |
|-------------------|----------------|----------------------------------------|-----------------------------|
| Short-circuit     | 1 <sub>H</sub> | Short-circuit encoder supply to ground | Eliminate the short-circuit |

## Technical specifications

### 6.1 Technical specifications

#### Technical specifications of the DI 8x24VDC 4xM12 digital input module

|                                                              | 6ES7141-5AF00-0BA0                                                                   |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>General information</b>                                   |                                                                                      |
| Product type designation                                     | DI 8X24VDC, 4XM12                                                                    |
| Hardware functional status                                   | E01                                                                                  |
| Firmware version                                             | V1.0.x                                                                               |
| <b>Product function</b>                                      |                                                                                      |
| I&M data                                                     | Yes; I&M0 to I&M3                                                                    |
| <b>Engineering with</b>                                      |                                                                                      |
| STEP 7 TIA Portal can be configured/integrated as of version | As of STEP 7 V13 SP1                                                                 |
| STEP 7 can be configured/integrated as of version            | V5.5 SP4 Hotfix 7 or higher                                                          |
| PROFIBUS as of GSD version/GSD revision                      | GSD as of revision 5                                                                 |
| PROFINET as of GSD version/GSD revision                      | GSDML V2.3.1                                                                         |
| <b>Supply voltage</b>                                        |                                                                                      |
| <b>Load voltage 1L+</b>                                      |                                                                                      |
| Rated value (DC)                                             | 24 V                                                                                 |
| Low limit of permitted range (DC)                            | 20.4 V                                                                               |
| High limit of permitted range (DC)                           | 28.8 V                                                                               |
| Reverse polarity protection                                  | Yes; against destruction; encoder supply outputs are connected with reverse polarity |
| <b>Input current</b>                                         |                                                                                      |
| Current consumption (rated value)                            | 25 mA; no load                                                                       |
| From load voltage 1L+ (unswitched voltage)                   | 4 A; maximum value                                                                   |
| From load voltage 2L+, max.                                  | 4 A; maximum value                                                                   |
| <b>Encoder supply</b>                                        |                                                                                      |
| Number of outputs                                            | 4                                                                                    |
| <b>24 V encoder supply</b>                                   |                                                                                      |
| Short-circuit protection                                     | Yes; per module, electronic                                                          |
| Output current, max.                                         | 0.7 A; total current of all encoders                                                 |
| <b>Power loss</b>                                            |                                                                                      |
| Power loss, typ.                                             | 1.9 W                                                                                |
| <b>Digital inputs</b>                                        |                                                                                      |
| Number of inputs                                             | 8                                                                                    |
| Input characteristic curve acc. to IEC 61131, type 3         | Yes                                                                                  |

|                                                                                                       | 6ES7141-5AF00-0BA0                          |
|-------------------------------------------------------------------------------------------------------|---------------------------------------------|
| <b>Number of inputs that can be controlled simultaneously</b>                                         |                                             |
| All mounting positions                                                                                |                                             |
| <ul style="list-style-type: none"> <li>up to 55 °C, max.</li> </ul>                                   | 8                                           |
| <b>Input voltage</b>                                                                                  |                                             |
| Type of input voltage                                                                                 | DC                                          |
| Rated value (DC)                                                                                      | 24 V                                        |
| For signal "0"                                                                                        | -30 ... +5 V                                |
| For signal "1"                                                                                        | +11 ... +30 V                               |
| <b>Input current</b>                                                                                  |                                             |
| For signal "1", typ.                                                                                  | 3.2 mA                                      |
| <b>Input delay (for rated value of input voltage)</b>                                                 |                                             |
| For standard inputs                                                                                   |                                             |
| <ul style="list-style-type: none"> <li>at "0" to "1", min.</li> </ul>                                 | 1.2 ms                                      |
| <ul style="list-style-type: none"> <li>at "0" to "1", max.</li> </ul>                                 | 4.8 ms                                      |
| <ul style="list-style-type: none"> <li>at "1" to "0", min.</li> </ul>                                 | 1.2 ms                                      |
| <ul style="list-style-type: none"> <li>at "1" to "0", max.</li> </ul>                                 | 4.8 ms                                      |
| <b>Cable length</b>                                                                                   |                                             |
| Unshielded, max.                                                                                      | 30 m                                        |
| <b>Encoders</b>                                                                                       |                                             |
| <b>Connectable encoders</b>                                                                           |                                             |
| 2-wire sensor                                                                                         | Yes                                         |
| <ul style="list-style-type: none"> <li>Permissible quiescent current (2-wire sensor), max.</li> </ul> | 1.5 mA                                      |
| <b>Interrupts/diagnostics/status information</b>                                                      |                                             |
| <b>Interrupts</b>                                                                                     |                                             |
| Diagnostic interrupt                                                                                  | Yes; configurable                           |
| <b>Diagnostics alarms</b>                                                                             |                                             |
| Short-circuit                                                                                         | Yes; encoder supply to ground; module-based |
| <b>Diagnostics indicator LED</b>                                                                      |                                             |
| Channel status display                                                                                | Yes; green LED                              |
| For module diagnostics                                                                                | Yes; green/red LED                          |
| <b>Electrical isolation</b>                                                                           |                                             |
| Between load voltages                                                                                 | Yes                                         |
| <b>Electrical isolation of channels</b>                                                               |                                             |
| Between channels                                                                                      | No                                          |
| Between the channels and backplane bus                                                                | Yes                                         |
| Between the channels and power supply of the electronics                                              | No                                          |
| <b>Insulation</b>                                                                                     |                                             |
| Insulation tested with                                                                                | 707 V DC (type test)                        |

6.1 Technical specifications

|                                                  | 6ES7141-5AF00-0BA0  |
|--------------------------------------------------|---------------------|
| <b>Degree of protection and protection class</b> |                     |
| Degree of protection according to EN 60529       |                     |
| • IP65                                           | Yes                 |
| • IP67                                           | Yes                 |
| <b>Ambient conditions</b>                        |                     |
| <b>Ambient temperature in operation</b>          |                     |
| Min.                                             | -25 °C              |
| Max.                                             | 55 °C               |
| <b>Connection technology</b>                     |                     |
| Inputs/outputs                                   | M12, 5-pin          |
| Power supply                                     | M8, 4-pin           |
| <b>ET-Connection</b>                             |                     |
| ET-Connection                                    | M8, 4-pin, shielded |
| <b>Dimensions</b>                                |                     |
| Width                                            | 30 mm               |
| Height                                           | 159 mm              |
| Depth                                            | 40 mm               |
| <b>Weights</b>                                   |                     |
| Weight, approx.                                  | 145 g               |

# PROFenergy

## 7.1 Pause function

### Introduction

PROFenergy is a PROFINET-based data interface for switching off consumers centrally and in a coordinated manner during pause times regardless of the manufacturer or device type. This has the aim that the process is only provided with the energy that is absolutely required. The majority of the energy is saved by the process itself; the PROFINET device itself only contributes a few watts of saving potential. In PROFenergy, this operating state is referred to as a "pause".

### Start and end of a pause

You enable and disable the pause function of the system at the beginning and end of pauses, respectively; the IO controller then sends the PROFenergy command "Start\_Pause" or "End\_Pause" to the modules.

Use the "Start\_Pause" command to start a pause.

Use the "End\_Pause" command to end a pause.

The following conditions will also cause a pause to be ended:

- Reconfiguration in RUN
- Controller failure
- Firmware update
- Station stop
- Restart of the interface module through:
  - POWER OFF/POWER ON of an interface module
  - POWER OFF/POWER ON of an I/O module
  - Termination of ET-Connection1 or ET-Connection2

The specific behavior of the digital input module is explained in the following section.

### Additional information

You can find additional information on working with PROFenergy in the "PROFenergy" section of the manual IM 157-1 PN interface module (<https://support.industry.siemens.com/cs/ww/en/view/89254863>) and the "Saving energy with PROFenergy" section of function manual PROFINET with STEP 7 V13 (<https://support.industry.siemens.com/cs/ww/en/view/49948856>).

Application examples (<https://support.industry.siemens.com/cs/ww/en/view/41986454>) are also available on the Internet.

## 7.2 Behavior of the digital input module

### Display

The channel status LEDs are directly influenced by the signal level at the socket.  
If the encoder supply is switched off, this causes the channel status LEDs to also switch off.

### Response to error detection

All channels that are in pause mode on "PE\_MODE\_PROCEED" report their diagnostic status as in productive mode.

The following applies for all channels which switch to a different pause mode:

- Encoder supply switch-off upon the start of "pause" does not result in the "Short-circuit" alarms.
- During the "pause", error detection of "Short circuit" is not possible:
  - Alarms for errors already pending before the "pause" are retained.
  - After the "pause" is over, the error status is updated and incoming/outgoing errors are reported correspondingly.

### Mode parameter

The following table shows the "Mode" parameter.

Table 7- 1 Mode parameter

| Element | Code                                 | Explanation                                                                                                                                                                                                                                  |
|---------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mode    | 0 <sub>D</sub> : PE_MODE_PROCEED     | Proceed at "pause"<br><ul style="list-style-type: none"> <li>• Value status "GOOD"</li> </ul>                                                                                                                                                |
|         | 1 <sub>D</sub> : PE_MODE_SHUTDOWN    | Switch off at "pause"<br><ul style="list-style-type: none"> <li>• Encoder supply U<sub>S</sub> switched off <sup>1</sup></li> <li>• Pause substitute value: 0<sub>B</sub></li> <li>• Value status "BAD"</li> </ul>                           |
|         | 3 <sub>D</sub> : PE_MODE_LAST_VALUE  | Last value at "pause"<br><ul style="list-style-type: none"> <li>• Encoder supply U<sub>S</sub> switched off <sup>1</sup></li> <li>• Pause substitute value: Last input value</li> <li>• Value status "BAD"</li> </ul>                        |
|         | 4 <sub>D</sub> : PE_MODE_SUBST_VALUE | Substitute value at "pause"<br><ul style="list-style-type: none"> <li>• Encoder supply U<sub>S</sub> switched off <sup>1</sup></li> <li>• Pause substitute value: Configured pause substitute value</li> <li>• Value status "BAD"</li> </ul> |

<sup>1</sup> As there is only one encoder supply U<sub>S</sub> for all channels, the supply can only be switched off at "pause" if no channel is configured in PE\_MODE\_PROCEED.

## Dimension drawing

The figure below shows the dimension drawing of the DI 8x24VDC 4xM12 digital input module in front and side view.

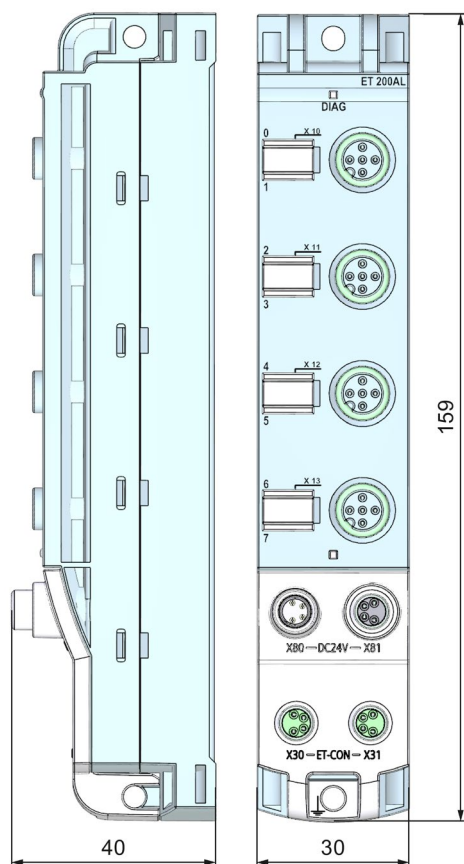


Image A-1 Dimension drawing