

# SIMATIC ET 200 distributed I/O system

## Introduction

- ET200 distributed I/O's are remote I/O's in SIMATIC
- Provides the 'finer' way for simplified and low-cost field wiring tasks using Profibus-DP for remote I/O's
- Distributed I/O behaves like centralized I/O in functional terms
- Configuring and parameterization of I/Os with STEP 7! No additional software!!
- Diagnostics, programming and control via PROFIBUS-DP from any point on the bus system
- Activate/deactivate DP slaves during operation! **Suitable for replacing/changing the necessary hardware ONLINE!**
- Up to 12 Mbit/s data transfer rate on Profibus-DP
- Inter-node traffic between slaves for lightning-fast communications
- Isochronous DP cycle with 1 $\mu$ s accuracy for 'Synchronized Communication' in Motion control applications.
- All ET 200 I/O systems can be used in combination with each other

## Product Position: -

ET 200 distributed I/O systems are suggested to simplify and economize 'Field Wiring' and prepare easy to maintain setup.

Particularly when the field elements are away from the PLC CPU because of widespread and distributed process/plant set up it becomes very effective.

Variety of such distributed I/O systems available to take care of different requirements!

Configuration	Suitability	Baud Rate	Remarks
ET200 M	>100 I/O's	Up to 12 Mbps	FMs, CPs possible!!!
ET200 L	Less & Compact I/O's per group	Up to 1.5 Mbps	Not Possible!!
ET200 S	High I/O number with variety! Possibility of pre-wiring and safety integrated configurations	Up to 12 Mbps	Special Modules for specific functionality!

- **ET 200M modular I/O system**
  - For distributed use of the S7-300 **signal and function modules**
  - **2 header modules called interface module (IM153-X)**, differing in performance and price are available
  - Up to 8, S7-300 modules can be connected per header module
  - Flexible in expansion and maintenance
  - Active bus modules for plugging in and removing modules during operation (**Hot swapping**)
  - Also available with integral fiber-optic interface
  - Can be used for **redundant configurations (S7-300/400 R and S7-400H)**
  - Supports 'F' (**Fail safe**) technology
  - It is DPV1 slave, can be configured using Step7/COM Profibus/Third party SW tool using GSD file.

### **Modules for ET 200M**

- Main module for ET 200 M configuration is Interface module (IM153-X)
- In case of hot swapping and redundant configurations, **Active Bus Modules** are required.
- **Signal modules, CPs and Function modules of S7-300** family can be used in ET 200M configurations. While in **S7-300/400R** systems, **all signal modules, CP340/341 and FM350 only can be used**
- A power supply module is required to power up the IM and other modules in distributed rack.

### ➤ **Features of different Interface Modules**

- **IM 153-1** is a slave interface for connecting an ET 200M to Profibus. Optionally it is available in amplified temperature range and unusual atmospheric demands.
  - Maximum number of module connectable-8
  - Address space 128 bytes for inputs and 128 bytes for outputs.
  - Inter node communication is possible as a transmitter.
  - Suitable for synchronous operation like motion control applications.
  - Supports time stamp functionality and 'time of day synchronization'
  - Operates up to 12 MBPS, auto detection of transmission rate.
- **IM 153-2 (HF)** is having similar function but **additionally** it supports use in **redundant systems**.
  - **It can be used with S7-400H, S7-300/400R redundant systems as well as S5-155H**
  - **Active bus module IM153/IM153** is necessary for mounting of IM while configuring redundant/H system
  - For hot swapping of the power supply and an IM 153 during RUN another bus module is required.
  - Redundancy bundle is also available consisting of 2 IM 153-2 (HF) and a bus module IM 153/IM 153

- Analog Input and output modules with HART (Highway Addressable remote Transducer) can be connected to IM 153-2
- SM 321, 16 DI NAMUR, and SM 322, 16 x DQ DC24V / 0,5 A, supporting process control functions can only be used with IM 153-2
- **IM 153-2 FO** is available to connect ET 200M as a slave to the ‘**optical PROFIBUS**’.
  - This module also support use in **redundant configuration**.
  - Active bus module and other bus modules for IM 153-2 FO are same as IM153-2
  - **Plastic and PCF FO cables** can be directly connected
  - Suitable for **synchronous** operation.
  - Supports time stamp functionality and ‘time of day synchronization’

### List of Modules- ET 200M

Important Modules for ET 200M at a glance!			
Sr. No	MLFB	Description	Remark
<b>Interface Modules</b>			
1	6ES7 153-1AA03-0XB0	IM 153-1, Interface module for connecting ET200 M distributed I/O station	No redundancy supported
2	6ES7 153-1AA03-2XB0	IM 153-1, Interface module for connecting ET200 M distributed I/O station (For extreme cond.)	No redundancy supported
3	6ES7 153-2BA00-0XB0	IM 153-2, Interface module for connecting ET200 M distributed I/O station (High Features)	Redundancy, Hot swapping supported
4	6ES7 153-2BA00-0XB0	IM 153-2, Interface module for connecting ET200 M distributed I/O station on optical PROFIBUS	Redundancy, Hot swapping supported
<b>Bus Modules</b>			
1	6ES7 195-7HD10-0XA0	IM153/IM153 active bus module FOR 2 im153-2 for configuring redundant systems	Required for redundant configuration
2	6ES7 195-7HA00-0XA0	For mounting power supply and IM for hot swapping function during RUN mode	For Hot swapping
3	6ES7 195-7HB00-0XA0	For installing 2, 40 mm wide I/O modules for hot swapping function	For Hot swapping
4	6ES7 195-7HC00-0XA0	For installing 1, 80 mm wide I/O module for hot swapping function	For Hot swapping
5	6ES7 153-2AR01-0XA0	ET 200M redundancy bundle	
<b>Special Modules that can go with IM153-2 in addition to SM/FM's of S7-300</b>			
1	6ES7331-7TB00-0AB0	SM 331, 2 x 0.4...20 mA HART, for IM 153-2	Only with IM153-2
2	6ES7332-5TB00-0AB0	SM 332, 2 x 0.4...20 mA HART, for IM 153-2	Only with IM153-2
3	6ES7321-7TH00-0AB0	SM 321, 16 DI NAMUR, process control functions, can only be used with IM 153-2	Only with IM153-2
4	6ES7322-8BH00-0AB0	SM 322, 16 x DA DC24V / 0,5 A, process control functions, can only be used with IM 153-2	Only with IM153-2

➤ **ET 200L block I/O station**

- **ET200 L** provides connection of I/O module to the Profibus using interface integrated on the I/O module it self.
- Thus it provides a compact set of I/Os that can be straight hooked up on to the Profibus.
- It consists of one terminal block and one electronic module. ET200 L **is not expandable** and suitable only for **small and fixed number of DI/DO's**.
- **The Profibus port is galvanic ally isolated** w.r.t internal electronics. 24V DC supply for the module has built in reverse polarity protection. Also DC outputs are provided with electronic short circuit protection.

**Modules for ET 200L**

- Terminal blocks and electronic modules, are available with 16/32 channels. Electronic modules are available as Input modules/ Output modules or Mixed modules.
- Available as 16 DI, 16 DQ, 32 DI, 32 DQ or 16DI+16DQ module in DC 24V version.
- Available as 16 DQ/1A, 16DQ/2A, 16 DI or 8DI+8DQ (RO, 2A) and 120V AC variety
- The terminal block comes with 2 wire connection as standard, however using optional supplementary terminals, one can realize 3 or 4 wire connections.
- Transmission rate **up to 1.5 MBPS only**

<b>Important Modules for ET 200L at a glance!</b>			
Sr. No	MLFB	Description	Remark
<b>Terminal Block (TB)</b>			
1	6ES7 193-1CH00-0XA0	TB 16L for 16 channels, screw type connections	For DC 24V
2	6ES7 193-1CL00-0XA0	TB 32L for 32 channels, screw type connections	For DC 24V
3	6ES7 193-1CH20-0XA0	TB 16L for 16 channels, screw type connections	For AC 120V
<b>Electronic Block for ET 200L</b>			
1	6ES7 131-1BH01-0XB0	16 DI, 24 V DC	For DC 24V
2	6ES7 131-1BL01-0XB0	32 DI, 24 V DC	For DC 24V
3	6ES7 132-1BH00-0XB0	16 DO, 24 V DC, 0.5A	For DC 24V
4	6ES7 132-1BL00-0XB0	32 DO, 24 V DC, 0.5A	For DC 24V
5	6ES7 133-1BL01-0XB0	16 DI, 24V DC/16D0 24 V DC, 0.5A	For DC 24V
6	6ES7 131-1EH00-0XB0	16 DI, 120 V AC	For AC 120V
7	6ES7 132-1EH00-0XB0	16 DO, 120 V AC, 1A	For AC 120V
8	6ES7 132-1JH00-0XB0	16 DO, 120 V AC, 2A, RELAY	For AC 120V
9	6ES7 133-1EH00-0XB0	8 DI, 120V AC+ 8 DO 120 V AC, 1A	For AC 120V
10	6ES7 133-1JH00-0XB0	8 DI, 120V AC+ 8 DO 120 V AC, 2A, RELAY	For AC 120V

## ET 200S bit-modular I/O system

- **Suitable for configuring variety of modules in the slave rack in 'Function-oriented manner.**
- Can be configured for each station in a function-oriented manner and in any combination with up to 63 I/O modules (digital I/O, analog I/O, technology modules, or up to 20 motor starters to 7.5 kW or up to 20 frequency converters to 4.0 kW), completely pre-wired
- Wide range of Periphery module spectrum available
  - Digital and analog I/Os
  - Technology modules
  - Motor starter (up to 7,5kW) and frequency converter (up to 4kW) can be integrated
  - Safety integrated up to Category 4, EN954-1 (PROFIsafe and SIGUARD)
  - Diagnostics capability via PROFIBUS-DP diagnostics
  - Optimum dimensions for installation in control cabinet (small footprint)
  - **Number of modules per interface module range up to 63! Depending upon the IM type.**
  - Parameter length greater than 32 bytes, according to the number and type of modules plugged in.
  - User data length according to number and type of modules plugged in.
  - Diagnostics length, 17 to 64 bytes (configurable)
  - **Supports RIUP (Removal and Insertion Under Power)**

## Modules in ET 200S system

- **Interface module (IM151-X)** for connecting the ET 200S to Profibus DP. This module handles data exchange with DP master. Total 3 different versions of IM are available.
- There is a big variety of electronic module available viz. DI, DQ, AI, AQ
- Power module for electronic module (PM-E) is required to route the power supply to the electronic module. These modules are available in 24V DC, 24 to 48V DC and 24V DC/120 or 230V AC types. One must select the PM-E depending upon the electronic module types and number plugged in.

### ➤ **Special Electronic Modules**

- PM-E and electronic modules are also available as 'Fail safe' modules.
- IQ sense sensor modules (Electronic modules) are also available to facilitate connection of IQ sense sensor.
- Spare module is available which remains idle but occupies a slot in address image which in future can be used for expansion
- Terminal modules for PM-E as well as terminal modules for electronic modules are must as mechanical receptacles. They facilitate setting up of permanent wiring through self-configuring voltage buses. Different versions to accommodate, different PME-E and electronic modules

## ➤ Technology Modules

- **SSI modules** are available to connect SSI sensors to ET 200S system for position decoding and simple positioning tasks.
- **2 Channel, pulse generator modules** are available to generate final control pulses for valves/heater elements etc. Can be used to generate pulse trains, PWM output, pulse sequence and provide switching signals to 24V DC output.
- **1 Step, stepper module** for controlled positioning using stepper motor
- **1 POS, SSI/Digital positioning module** for controlled positioning using digital outputs using rapid/creep feed principle with actual position sensing from SSI encoders. Supports linear and rotary axes with absolute or relative positioning.
- **1 POS, SSI/Analog** positioning module for controlled positioning using analog output using rapid/creep feed principle with actual position sensing from SSI encoders. Supports linear and rotary axes with absolute or relative positioning.
- **1 POS, INC/Digital positioning module** for controlled positioning using digital outputs using rapid/creep feed principle with actual position sensing from incremental encoders according to RS422. Supports linear and rotary axes with absolute or relative positioning.
- **1 POS, INC/Analog positioning** module for controlled positioning using analog output using rapid/creep feed principle with actual position sensing from incremental encoders according to RS422. Supports linear and rotary axes with absolute or relative positioning.
- **1 Channel 32 bit counter modules** are available to count 24V pulses up to a maximum frequency of 100 KHz. Also available to count 5V pulses from incremental encoders (RS422) up to a maximum frequency of 500KHz.
- **1Channel communication interface module** is available to communicate (Serial data exchange) through point to point connection for message frames up to 200 byte long.
  - **RS232, RS422 and RS485** physics available for communication. Available in **two versions**, one supports **ASCII and 3964(R) protocol** and the other one supports **MODBUS and USS protocol**.
  - Transmission rates up to **19.2KBPS for ASCII/3964(R)** communication and **up to 38.4 KBPS for MODBUS/USS communication**.

## ➤ Motor Starters and Frequency Converters

### Motor Starters

- Completely factory wired motor starters for **switching and protecting three phase loads**. Available as direct on line, reversing and soft starters. Also available as **'fail safe'** design.
- Standard starters with **circuit breaker-contactor combination** up to **5kW** and **High feature motor starters** with circuit breaker, **solid state OL** protection and contactor or **soft starters** are available up to **7.5kW**.
- Self-assembling power bus (**up to 40/50 A**) concept facilitates load voltage connection once per motor starter group.
- **Diagnostic through Profibus**.
- **Hot swapping** is permitted.
- Can be combined with **optional expansion** modules such as **Brake control module to control electro mechanical holding brakes** in induction motors etc.
- Can be **combined** with **SIGUARD safety systems** for safety related subsystems.

### Frequency converters (ET200 FC)

- For **step less speed/torque control** of **asynchronous motors**.
- Consist of modules for control (**ICU24; Closed loop control module**) and **power module (IPM25)** available in two ratings, **0.75 kW and 4.0 kW**.
- **Hot swapping of control module** and **power supply** is permitted.
- No requirement for line **commutating reactors**.
- Active **braking with line commutated energy recovery**
- Can be combined with **optional expansion modules such as Brake control module to control electro mechanical holding brakes** in induction motors etc.
- Self-assembling **power bus (50 A)** concept facilitates load voltage connection once per motor starter group.
- Optional parameter **memory card (MMC)** available to **store the drive parameters**.
- To achieve EMC class A, EMC filter must be connected at the input of the POWER Bus.
- **ET 200S FC** is capable of dynamic control procedure such as **sensor less vector control or torque control**. If there is high demand on 'Speed Accuracy' and 'Dynamic Performance' then a motor encoder can be connected to the control module.

➤ **Power Modules for Motor Starters and Frequency Converters (PM-D)**

- **PM-D power modules** are used to monitor the two 24V DC auxiliary voltages for the group of Motor Starters/Frequency Converters. This is mounted on the right hand side of the main module (Motor Starter/Frequency Converter)
- The Voltage is applied to the self assembling voltage buses via TM-D terminal module. PM-D power modules are plugged on TM-P15 terminal modules. The PM-D power module must be followed by, at least one motor starter or frequency converter.
- Since the auxiliary voltage for signal feedback and power module control are separate, even if the whole group is shut down, diagnostics can still be performed.

<b>Important Modules for ET 200S at a glance!</b>			
Sr. No	MLFB	Description	Remark
<b>Interface Modules</b>			
1	6ES7 151-1CA00-0AB0	IM 151-1, Basic Interface module for connecting ET200 S distributed station	Up to 12 Modules Connectable
2	6ES7 151-1AA03-0AB0	IM 153-1, Standard Interface module for connecting ET200 S distributed station (128 Bytes for inputs and outputs)	Up to 63 Modules Connectable
3	6ES7 151-1AB02-0XB0	IM 151-1 FO, Standard Interface module for connecting ET200 S distributed station on optical PROFIBUS (128 Bytes for inputs and outputs)	Up to 63 Modules Connectable
4	6ES7 151-1BA00-0XB0	IM 153-1 HF, High Feature Interface module for connecting ET200 S distributed station (244 Bytes for inputs and outputs) connectable with PROFIsafe modules	Up to 63 Modules Connectable, isochrone mode,
<b>Power Modules for Electronic Modules (PM-E)</b>			
1	6ES7 138-4CA00-0AA0	PM-E 24 V DC with diagnostics	
2	6ES7 138-4CA50-0AB0	PM-E 24 to 48 V DC with diagnostics	
3	6ES7 138-4CB10-0AB0	PM-E 24 V DC/120/230 V AC with diagnostics and backup	
4	6ES7 138-4CF01-0AB0	PM-E F PROFIsafe 24 V DC for safe tripping of DQ	
<b>Special Modules that can go with ET 200S</b>			
1	6ES7 138-4GA00-0AB0	4IQ sense sensor module, can be used to connect Diffuse sensor/Reflex sensors and diffuse sensor with background fading	
2	6ES7 138-4AA00-0AA0	Spare module for unused slots for address space reservation (15 mm width)	
3	6ES7 138-4AA10-0AA0	Spare module for unused slots for address space reservation (30 mm width)	



<b>Technology Modules that can go with ET 200S</b>			
Sr. No	MLFB	Description	Remark
1	6ES7 138-4DB01-0AB0	1 Ch. SSI Module	
2	6ES7 138-4DD00-0AA0	2 Ch. Pulse generator and timer module	
3	6ES7 138-4DC00-0AB0	1 Stepper motor controller	
1	6ES7 138-4DH00-0AB0	1 POS SSI/Digital positioning module	
2	6ES7 138-4DK00-0AB0	1 POS SSI/Analog positioning module	
3	6ES7 138-4DG00-0AB0	1 POS INC/Digital positioning module	
1	6ES7 138-4DJ00-0AB0	1 POS INC/Analog positioning module	
2	6ES7 138-4DA03-0AB0	1 Ch. Counter 24V/ 100 KHz	
3	6ES7 138-4DE01-0AB0	1 Ch. Counter 5V/ 500 KHz	
1	6ES7 138-4DF00-0AB0	1 Serial communication interface for ASCII/3964(R)	
2	6ES7 138-4DF10-0AB0	1 Serial communication interface for USS/Modbus	

### Signal Modules in ET200S

<b>Digital Electronic Modules that can go with ET 200S</b>			
Sr. No	MLFB	Description	Remark
1	6ES7 131-4BB00-0AA0	2DI, 24V DC Standard (Pack of 5 Modules)	
2	6ES7 131-4BB00-0AB0	2DI, 24V DC High Feature (Pack of 5 Modules)	
3	6ES7 131-4BD00-0AA0	4DI, 24V DC Standard (Pack of 5 Modules)	
4	6ES7 131-4BD00-0AB0	4DI, 24V DC High Feature (Pack of 5 Modules)	
5	6ES7 131-4FB00-0AB0	2DI, 230V AC (Pack of 5 Modules)	
6	6ES7 132-4BB00-0AA0	2 DQ, 24V DC, 0.5A Standard (Pack of 5 Modules)	
7	6ES7 132-4BB00-0AB0	2 DQ, 24V DC, 0.5A High Feature (Pack of 5 Modules)	
8	6ES7 132-4BD00-0AB0	4 DQ, 24V DC, 0.5A Standard (Pack of 5 Modules)	
9	6ES7 132-4FB00-0AB0	2 DQ, 120/230 V AC, 1A (Pack of 5 Modules)	
10	6ES7 132-4HB00-0AB0	2 DQ, 24V DC & 230V AC, 5A Relay (Pack of 5 Modules)	
11	6ES7 132-4FB00-0AB0	2AI, Voltage, Standard (Pack of 1 Module)	
12	6ES7 134-4FB51-0AB0	2AI, Voltage, High Speed (Pack of 1 Module)	
13	6ES7 134-4LB00-0AB0	2AI, Voltage, High Feature (Pack of 1 Module)	
14	6ES7 134-4GB00-0AB0	2AI, Current, Standard, 2 Wire (Pack of 1 Module)	
15	6ES7 134-4GB51-0AB0	2AI, Current, High Speed, 2 Wire (Pack of 1 Module)	
16	6ES7 134-4GB10-0AB0	2AI, Current, Standard, 4 Wire (Pack of 1 Module)	
17	6ES7 134-4GB61-0AB0	2AI, Current, High Speed, 4 Wire (Pack of 1 Module)	
18	6ES7 134-4MB00-0AB0	2AI, Current, High Feature, 2 / 4 Wire, 15 Bit+Sign (Pack of 1 Module)	
19	6ES7 134-4JB50-0AB0	2 AI, RTD, (Pack of 1 Module)	
20	6ES7 134-4JB00-0AB0	2 AI, Thermocouple, (Pack of 1 Module)	
21	6ES7 134-4FB00-0AB0	2 AQ, Voltage, Standard (Pack of 1 Module)	
23	6ES7 135-4LB01-0AB0	2 AQ, Voltage, High Feature (Pack of 1 Module)	
24	6ES7 135-4GB00-0AB0	2 AQ, Current, Standard (Pack of 1 Module)	
25	6ES7 135-4MB01-0AB0	2 AQ, Current, High Feature (Pack of 1 Module)	
26	6ES7 138-4DF00-0AB0	ISI interface module - ASCII & 3964R Protocol	
27	6ES7 138-4DF10-0AB0	ISI interface module – Modbus (Master/Slave), USS protocols	
28	6ES7 138-4DA03-0AB0	1 Channel Counter, 24V DC/ 100 kHz Counter module	

HW Config - [SIMATIC 400(1) (Configuration) -- et]

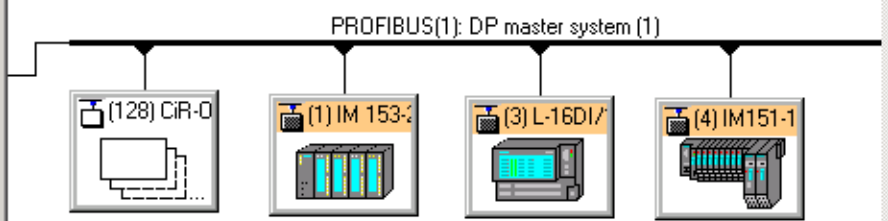
Station Edit Insert PLC View Options Window Help



(0) UR2

1	PS 405 4A
2	<b>CPU 414-2 DP</b>
X2	DP
X1	MPI/DP
3	
4	
5	
6	

Address Overview



PROFIBUS(1): DP master system (1)

PROFIBUS address	Module	Order number	Firmware	Diagnostic address	Comment
1	<b>IM 153-2, redundant</b>	6ES7 153-2BA00-0XB0		8189	
3	<b>L-16DI/16DO DP</b>	6ES7 133-1BLO*-0XB0		8187	
4	<b>IM151-1 High Feature</b>	6ES7 151-1BA00-0AB0		8186	
128	CiR-Object				

Shows the address overview of the current station.



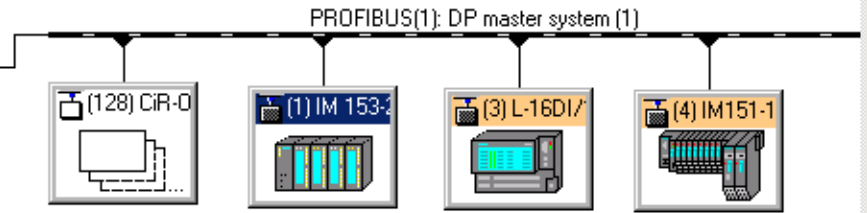
HW Config - [SIMATIC 400(1) (Configuration) -- et]

Station Edit Insert PLC View Options Window Help



(0) UR2

1	PS 405 4A
2	<b>CPU 414-2 DP</b>
X2	DP
X1	MPI/DP
3	
4	
5	
6	



(1) IM 153-2, redundant

Slot	Module	Order Number	I Address	Q Address	Comment
1					
2	IM 153-2	6ES7 153-2BA00-0AB0	8188		
3					
4	DI16xDC24V, Interrupt	6ES7 321-7BH00-0AB0	2...3		
5	DO16xDC24V/0.5A	6ES7 322-8BH01-0AB0		0...1	
6	AI4/AO4x14/12Bit	6ES7 335-7HG01-0AB0	512...527	512...519	
7	CiR module				
8					
9					
10					
11					

Press F1 to get Help.



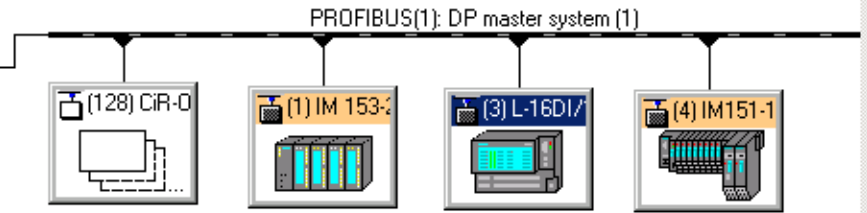
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Station Edit Insert PLC View Options Window Help



(0) UR2

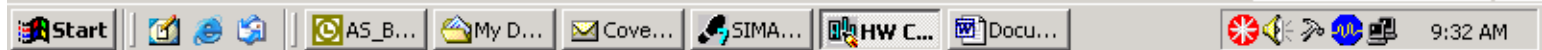
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2	<b>CPU 414-2 DP</b>
X2	DP
X1	MPI/DP
3	
4	
5	
6	

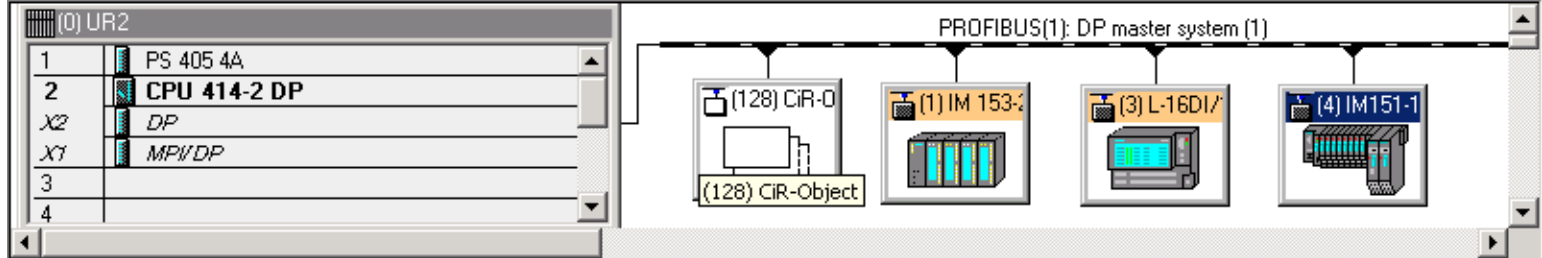
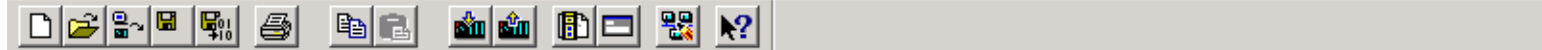


[3] L-16DI/16DO DP

Slot	Order Number / Designation	I Address	Q Address	Comment
1	16D 2 Byte Out, 2 Byte In		2...3	
2	16D 2 Byte Out, 2 Byte In	0...1		

Press F1 to get Help.





← → (4) IM151-1 High Feature Pack addresses

Slot	Module	Order Number	I Address	Q Address	Diagnostic address	Comment
1	PM-E DC24V	6ES7 138-4CA00-0AA0			8185*	
2	4DI DC24V HF	6ES7 131-4BD00-0AB0	4.0...4.3			
3	4DI DC24V HF	6ES7 131-4BD00-0AB0	5.0...5.3			
4	4DI DC24V HF	6ES7 131-4BD00-0AB0	6.0...6.3			
5	4DI DC24V HF	6ES7 131-4BD00-0AB0	11.0...11.3			
6	2DO DC24V/2A HF	6ES7 132-4BB30-0AB0		9.0...9.1		
7	2DO DC24V/2A HF	6ES7 132-4BB30-0AB0		10.0...10.1		
8	2DO DC24V/2A HF	6ES7 132-4BB30-0AB0		8.0...8.1		
9	2DO DC24V/2A HF	6ES7 132-4BB30-0AB0		11.0...11.1		
10	PM-E DC24V	6ES7 138-4CA00-0AA0			8183*	
11	2AI I 2/4WIRE HF	6ES7 134-4MB00-0AB0	528...531			
12	2AI RTD HF	6ES7 134-4NB50-0AB0	532...535			
13	2AI TC HF	6ES7 134-4NB00-0AB0	536...539			
14	2AO U HF	6ES7 135-4LB00-0AB0		520...523		
15	PM-D DC24V	3RK1 903-0BA00			8184*	
16	RS1e-x 0.3-3A High F.	3RK1 301-0AB10-1AA2	7.0...8.7	4.0...5.7		
17	DS1e-x 0.3-3A High F.	3RK1 301-0AB10-0AA3	9.0...10.7	6.0...7.7		

Press F1 to get Help.