

OMC System Software
High-performanceHMI
Export Tool
User Manual
IM41S70-E

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Export Tool

Section 1 Overview

VFExport is one component of High-performanceHMI software package, and it exports the required information automatically by reading the configuration archive information, which facilitates the engineering application.

VFExport exports information in the unit of control station, including "Cabinet Layout", "Terminal Board Wiring Diagram" and "Tag List". "Cabinet Layout" indicates the cabinet number in the system and the module layout in each cabinet;" Terminal Board Wiring Diagram " indicates the terminal wiring of each module; "Tag List" indicates the statistical data of the tags used by system. All the information can not only facilitate engineers, but also be submitted to users as the delivery information.



Tip:

This tool can only be applied in configuration server.

1.1 Technical Specification

- The maximum cabinet number exported by "Cabinet Layout": 32
- The maximum module number exported by " Terminal Board Wiring Diagram": 512
- The maximum tag number exported by "Tag List": 2000
- Time of exporting all the information of single station: ≤ 4min

1.2 Configuration Criterion

The hardware configuration should conform to the following criterion before exporting "Cabinet Layout", "Terminal Board Wiring Diagram " and "Tag List".

The actual address of the rack should be written in the rack remark in hardware configuration software, shown as follows.

The remark format of the rack: "SC cabinet number-rack number: actual remark ", Such as"SC0-0:

No.0 cabinet No.0 rack".

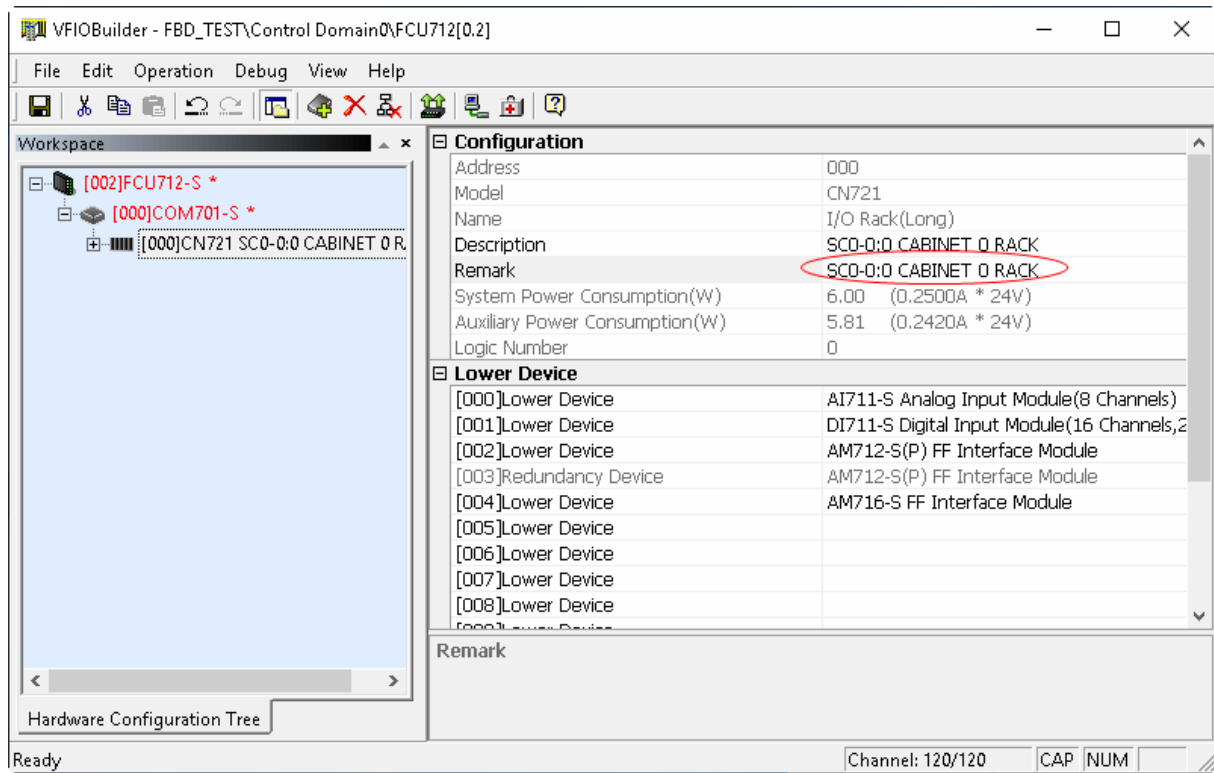


Figure 1-1 Remark format of the rack

Section 2 Introduction to Main Interface

The main interface of VFExport is shown as follows.

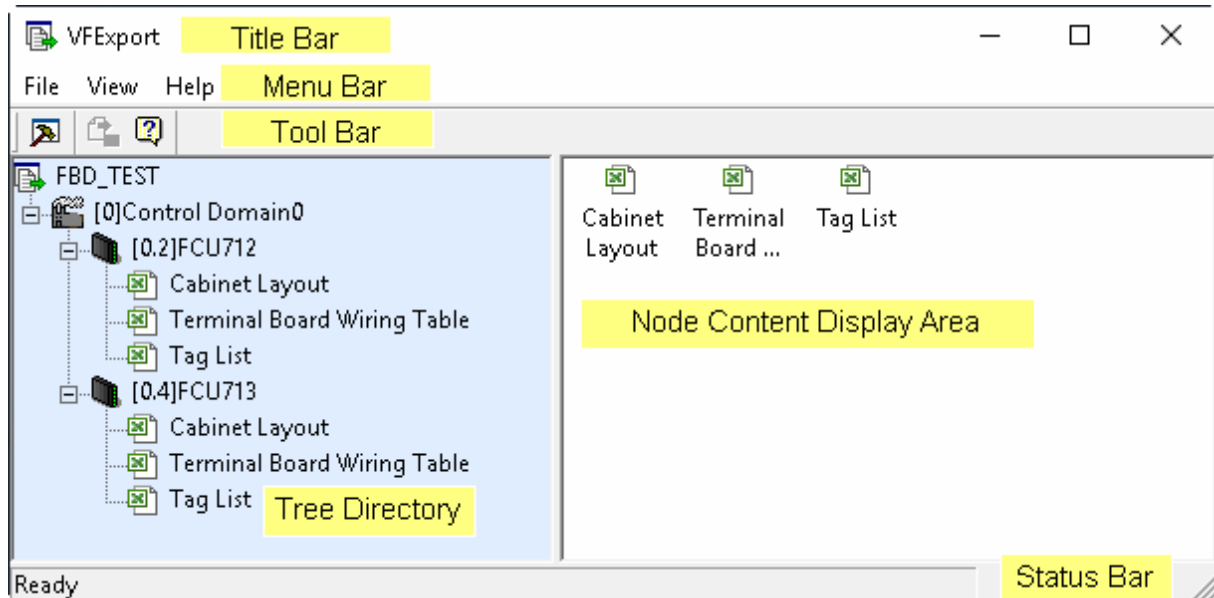




Figure 2-1 Main interface of the VFExport


2.1 Title Bar and Status Bar

- The title bar mainly displays the software name.
- The status bar mainly displays the function of the menu item or icon on the toolbar where the cursor is currently.

2.2 Menu Bar and Toolbar

Table 2-1 Function of menu bar and toolbar

Main menu	Submenu	Tool icon	Function
File	Project setting		Set the information of the project to be exported
	Export project file		Export project files
	Exit		Exit software
View	Toolbar		Show/hide the tool bar
	Status bar		Show/hide the status bar

Main menu	Submenu	Tool icon	Function
Help	About VFExport		Show the program information, version and copyright

2.3 Tree Catalogue and Node Display area

- The tree catalogue is on the left of the interface, displaying the project name and the structure of control domain.
- The node display area is on the right of the interface, displaying the export archive content according to the choice of users.

Section 3 Usage instruction

3.1 Start up VFExport



Select **OMC > Intelligent Application Management** from start menu. In Intelligent Application Management software, click  > **Tool > Export Tool** or click VFExport.exe  under the installation path (C:\OMC\VisualField4\VFExport.exe) to open the VFExport software as shown Figure 3-1.



Figure 3-1 VFExport software

3.2 Project Setting


Select the menu **File > Project Settings**, or click  in the toolbar and the dialog box of **Settings** will pop up. Fill in the project information in this dialog box, including Project Name, System Description, Designer, Censor, Approver, Contract No., Design Stage (Version) and Date, shown as follows.

Figure 3-2 Dialog box "Project Settings"


Instruction to "Project Settings are shown as follows:

Table 3-1 Instruction to "Project Settings"

Item	Instruction
Project Name	The name of the project, which is the configuration name by default. Must fill.
System Description	The default is "OMC Control system"(OMC)
Designer	Person (or department) who designed
Censor	Person (or department) who audited
Approver	Person (or department)who approved
Contract No.	The contract number of the project, 200 by default
Design Stage (Version)	Description of design stage: Initial Version, Internal Review Version, User Approval Version, Confirmation Version, Detail 1 Version, Detail 2 Version, construction Version, Final Version. Must fill.
Date	The exported date, current date by default

Click "OK" to load the configuration after filling in all the information.

3.3 Export Project Files

Select an item in the control station, such as "Cabinet Layout", then select the menu **File > Export Project Files** or click button  in the toolbar, shown as follows.

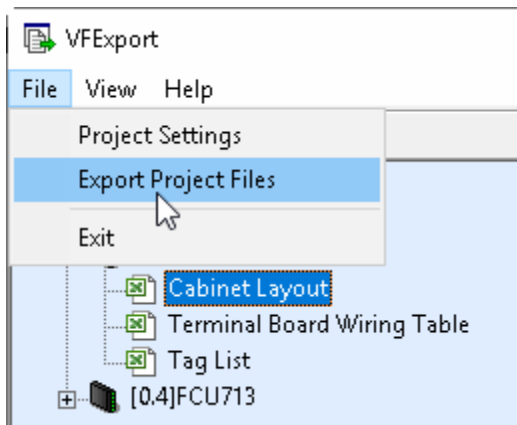


Figure 3-3 Export Project Files

The dialog box of "Export Settings" will pop up shown as follows.

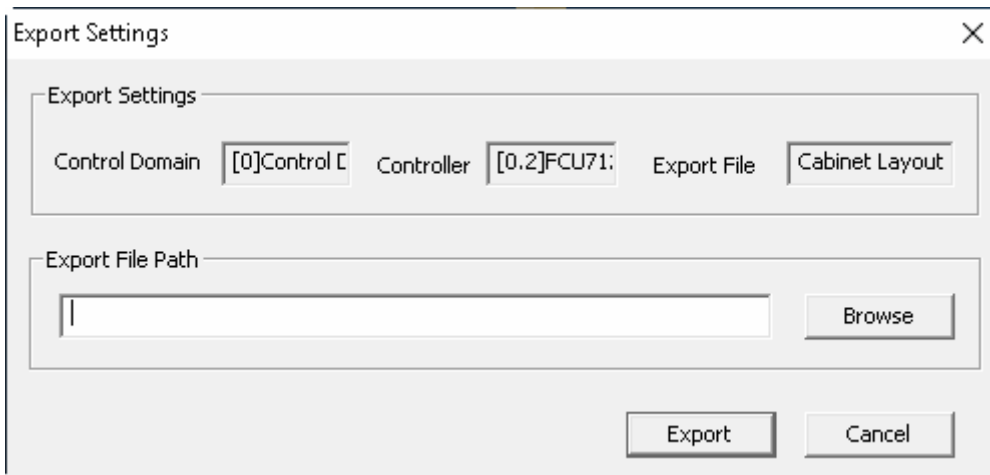


Figure 3-4 Export Settings

"Export Settings" lists the address and name of the control domain, the address and name of the controller and the exported file type.

Click the "Browse" button, and the dialog box of "Save As" will pop up, shown as follows.

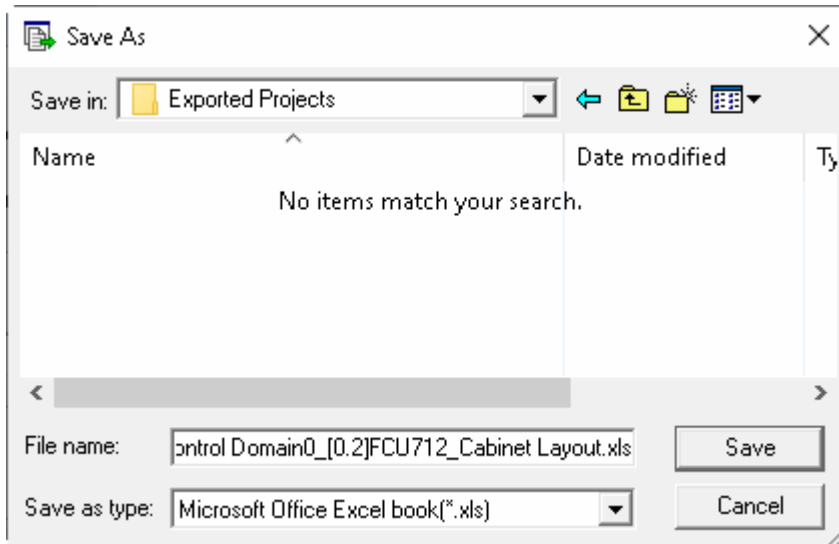


Figure 3-5 Dialog box "Save As"

Select the saving path and enter the filename to save the exported file. The filename is "Project Name_Control Domain Address+Name_Controller Address+Name_File Type "by default, for example, "INDBARATHPOWER_[0]Combustion_[0.2]Steam_Water_Cabinet Layout Diagram".

Click **Save**, then the saving path will be displayed in "Export File Path" in Figure 3-4. Click the **Export** button, the file will be exported, and the prompt dialog box will pop up if exported successfully.

3.4 Fault and Troubleshooting in the Process of Export

Fault and troubleshooting in the process of export are shown in following table.

Table 3-2 Fault and troubleshooting in the process of export

Problem	Instruction	Solution
When a file is selected, pop up a dialog box saying "Hardware configuration disaccords with configuration export criterion!"	The hardware configuration doesn't conform to the configuration criterion (Refer to chapter 1.2 Configuration criterion for details)	Modify the configuration according to the configuration criterion
When a file is selected, pop up a dialog box saying "Can not get cabinet number!"	The hardware configuration doesn't conform to the configuration criterion (Refer to chapter 1.2 Configuration criterion for details)	Modify the configuration according to the configuration criterion
When a file is selected, pop up a dialog box saying "Can not get rack number! "	The hardware configuration doesn't conform to the configuration criterion (Refer to chapter 1.2 Configuration criterion for details)	Modify the configuration according to the configuration criterion

Problem	Instruction	Solution
When export, pop up a dialog box saying "Failed to create Excel service!"	With no Excel or Excel version is too low	Install Excel 2000 or above version
When export, pop up a dialog box saying "Export error!"	Template file doesn't exist or template file error	Reinstall the VFExport software



Tip:

Configuration should be downloaded again when modified, that is to execute “Project Settings” before exporting the project information.

Section 4 Instruction to Export Information

4.1 Cabinet Layout

"Cabinet Layout" indicates the cabinet number in the system and the module layout in each cabinet. One cabinet takes one page shown as follows.

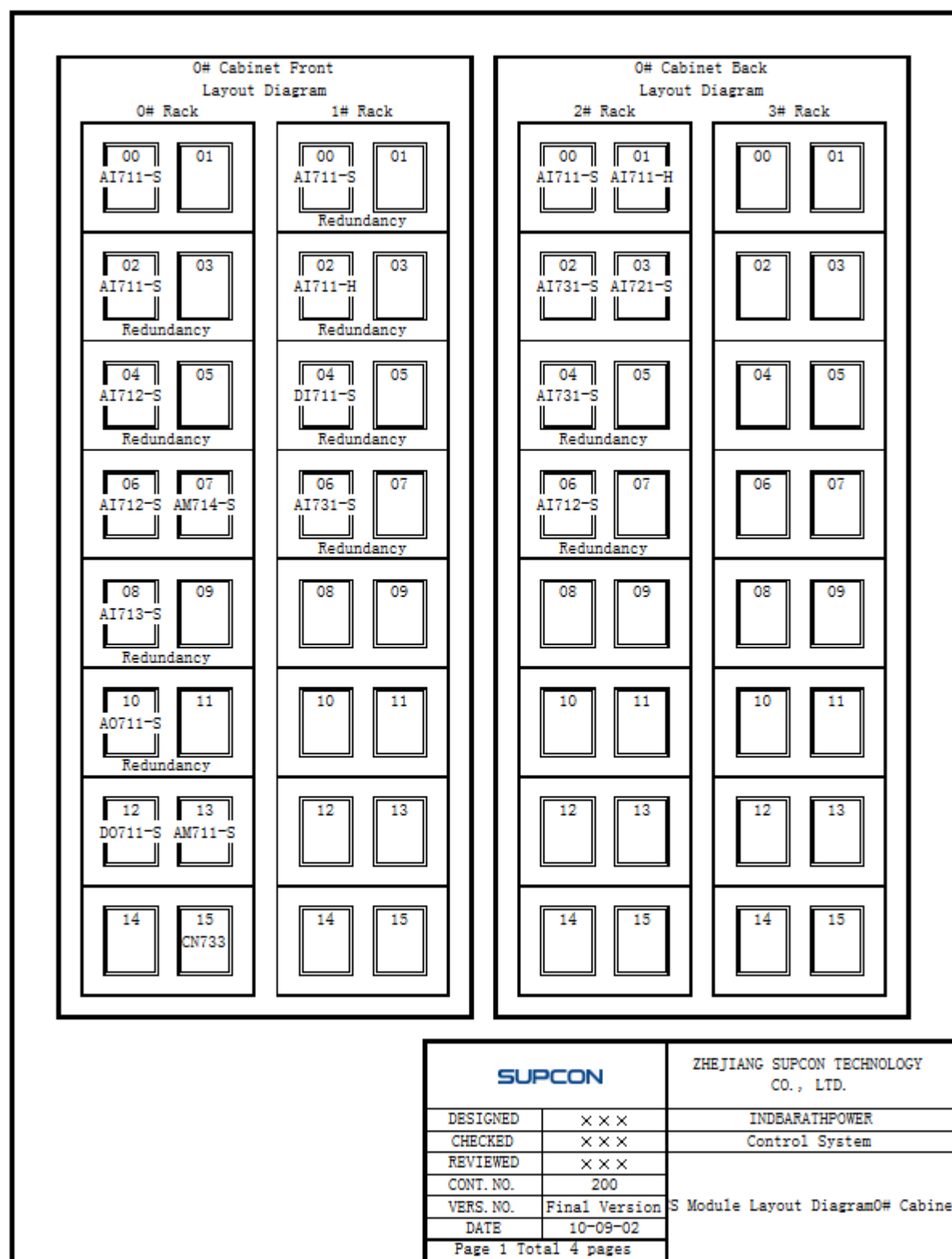


Figure 4-1 Cabinet layout (one page)

Four racks in one cabinet are shown in one page (one cabinet) from left to the right, and each rack has sixteen modules. The first row in the module indicates the module address and the second

row indicates the module type. If two adjacent modules are redundant, display "Redundancy". If one position has neither module type nor "Redundancy", then it means this position of the rack isn't configured. The information displayed in the lower right is the project information.

4.2 Terminal Board Wiring Diagram

"Terminal Board Wiring Diagram" indicates the wiring of each channel and field signal. One module takes one page shown as follows.

Cabinet-Rack-Module 00-00-00 AI711-S						
Field Side			DCS Side		Field Side	
Tag Description	Tag	Change-over Terminal	Terminal NO.		Change-over Terminal	Tag
Standby	AI00020000(+)		01	02		
	AI00020000(-)		03	04		
Standby	AI00020001(+)		05	06		
	AI00020001(-)		07	08		
Standby	AI00020002(+)		09	10		
	AI00020002(-)		11	12		
Standby	AI00020003(+)		13	14		
	AI00020003(-)		15	16		
Standby	AI00020004(+)		17	18		
	AI00020004(-)		19	20		
Standby	AI00020005(+)		21	22		
	AI00020005(-)		23	24		
Standby	AI00020006(+)		25	26		
	AI00020006(-)		27	28		
Standby	AI00020007(+)		29	30		
	AI00020007(-)		31	32		
			33	34		
			35	36		

SUPCON		ZHEJIANG SUPCON TECHNOLOGY CO., LTD.	
DESIGNED	× × ×	INDBARATHPOWER	
CHECKED	× × ×	Control System	
REVIEWED	× × ×		
CONT. NO.	200	Terminal Board Wiring Table	
VERS. NO.	1.0		
DATE	10-09-02		
Page 1 Total 39 page			

Figure 4-2 Terminal wiring diagram (one page)

In the terminal wiring diagram, the dark part in the middle indicates the system terminal board, the tag in the same row as the "Terminal NO." indicates the tag connected to the terminal and the "Tag Description" indicates the description of the tag.

Symbols in the "terminal wiring diagram" indicate:

- Tag (+): indicate the positive terminal of the connection;
- Tag (-): indicate the negative terminal of the connection;
- Tag (a): indicate terminal a of the connection;
- Tag (b): indicate terminal b of the connection;
- Tag (c): indicate terminal c of the connection;
- No information indicates no connection;

The information displayed in the bottom right corner is the project information.

4.3 Tag List

"Tag List" indicates the statistical data of the tags measured by the system. One page of the exported "Tag List" is shown as follows.

NO.	Tag	Description	I/O Type	Signal Type	with power supply or not	Range/ON Description	Unit/OFF Description	Alarm Limit(H3:HH:H:L:LL:L3)	Cabinet-Rack-Module-Channel
1	AI00020000	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-000-000
2	AI00020001	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-000-001
3	AI00020002	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-000-002
4	AI00020003	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-000-003
5	AI00020004	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-000-004
6	AI00020005	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-000-005
7	AI00020006	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-000-006
8	AI00020007	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-000-007
9	AI00020008	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-002-000
10	AI00020009	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-002-001
11	AI00020010	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-002-002
12	AI00020011	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-002-003
13	AI00020012	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-002-004
14	AI00020013	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-002-005
15	AI00020014	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-002-006
16	AI00020015	Standby	AI711-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-002-007
17	AI00020016	Standby	AI712-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-004-000
18	AI00020017	Standby	AI712-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-004-001
19	AI00020018	Standby	AI712-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-004-002
20	AI00020019	Standby	AI712-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-004-003
21	AI00020020	Standby	AI712-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-004-004
22	AI00020021	Standby	AI712-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-004-005
23	AI00020022	Standby	AI712-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-004-006
24	AI00020023	Standby	AI712-S	Current(4mA~20mA)	Power Distribution	0.00-100.00	%	0.0:95.0:90.0:10.0:5.0:0	000-000-004-007

SUPCON		ZHEJIANG SUPCON TECHNOLOGY CO., LTD
DESIGNED		PROJECT NAME
CHECKED	× × ×	INDBARATHPOWER
REVIEWED	× × ×	
CONT. NO.	× × ×	
VERS. NO.	200	Control System
DATE	Final Version	
SHEET ? OF ?		

Figure 4-3 One page of the tag list

Parameter of the tag in the exported tag list is shown as follows:

Table 4-1 Instruction to tag list

Parameter	Instruction
NO.	Increased from 1
Tag	Tag name
Description	Description of the tag
I/O Type	Module which the tag belongs to (e.g., AI711-S, DI711-S)
Signal Type	Signal type of the tag such as (4~20) mA, (1~5) V
With power supply or not	Situation of power supply

Parameter	Instruction
Range/ON Description	This item indicates the measurement range when it is analog tag; this item indicates the ON description when it is digital tag.
Unit/OFF Description	This item indicates the unit when it is analog tag; this item indicates the OFF description when it is digital tag.
Alarm limit (H3:HH:H:L:LL:L3)	Alarm limit of the tag H3: HHH limit alarm HH: HH limit alarm H: High limit alarm L: Low limit alarm LL: LL limit alarm L3: LLL limit alarm
Cabinet-Rack-Module-Channel	The address of the tag ,such as 01-02-03-04 indicates the tag is in No.1 cabinet, No.2 rack, No.3 module and No.4 channel

Section 5 Revision

Table 5-1 Retrofit list of the version

Document Version	Applicable Version	Remarks
V1.0 (20230305)	OMC High-performanceHMI V4.70.00.00	First release.
V1.1 (20230830)	OMC High-performanceHMI V5.10.00.00-M	Updated screenshots.