



Technical Announcement

IABG, DELTA ELECTRONICS, INC

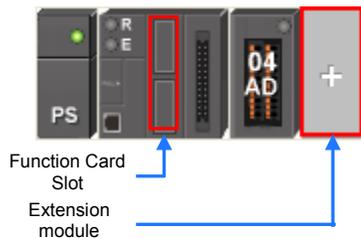
Product	ISPSOft	Applicable Model	All Series	Confidentiality Level	<input checked="" type="checkbox"/> General <input type="checkbox"/> Classified <input type="checkbox"/> Top secret
				ECN No.	N/A
Published by	PLCBU	Publisher	Jeff Shih	Publication No.	134A-P-ISPSOft-TAN04-EN
				Date of Publication	July 25, 2016
Published to	Sales/Product managers of TW, DGC, DPR, DGB, DMX, DEN, DIN, DESG, DEJ, DEK				

Object: ISPSOft version 3.02 is released.

Purpose: The functions which are modified and the functions which are added are described.

Description:

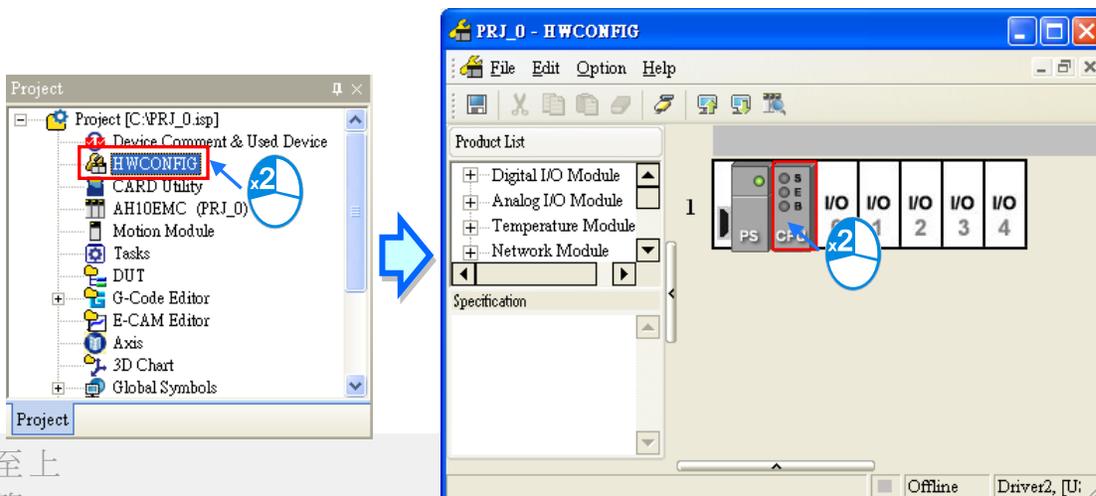
1. ISPSOft V3.02 now supports VFD-MS300, VFD-MH300, AS332T, AS332P and AS324MT models.
2. ISPSOft V3.02 now supports AH08EMC-5A, AH10EMC-5A, AH20EMC-5A models. (Henceforth, the three product series, AH08EMC-5A, AH10EMC-5A, AH20EMC-5A will be referred to as AHxxEMC series.)
3. HWCONFIG for newly added models in AS series
 - Designed with no backplane, the CPU module in AS series are equipped with function card slots and can support right-side extensions. Module setups can be done in HWCONFIG; as for the extension module setups, users need to go to the PLC parameter setting window. The setups will be updated in HWCONFIG and the information list simultaneously.



4. HWCONFIG for newly added models in AHxxEMC series
Be sure to refer to the relative manuals before any setup. In order to prevent any personal injury or property damage, make sure all the setups are done logically.

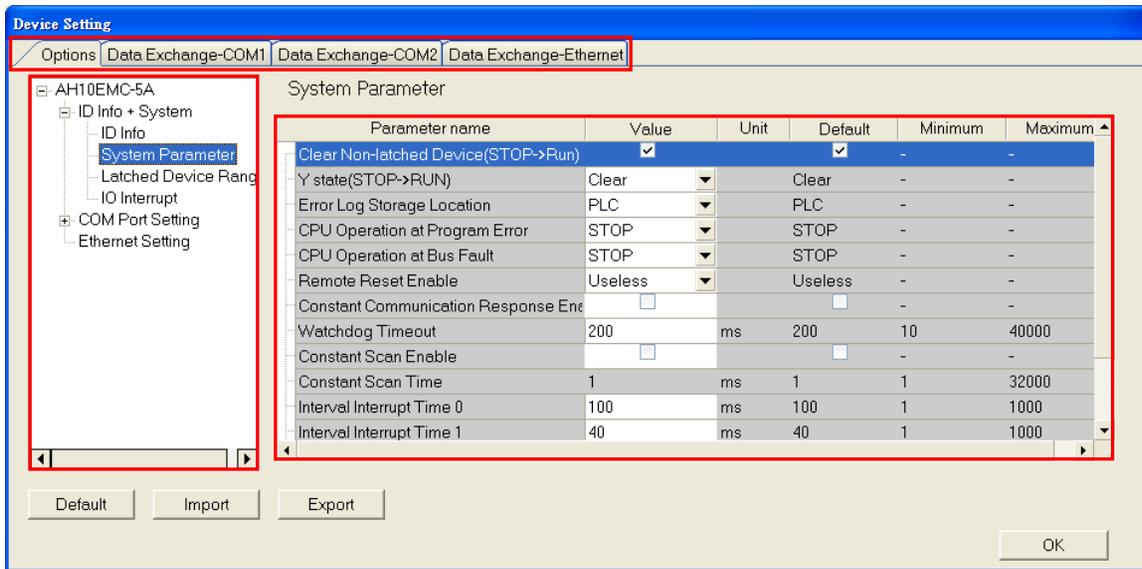
Double click HWCONFIG to go to HWCONFIG page and double click the CPU icon to go to the setting page.

There are various setting options on the setting page. Select the option tab on the top, users will see detailed setting items are listed and categorized into 6 groups, Parameter name, Value, Unit, Default, Minimum and Maximum on the right side of the page for users to configure. Select other tabs on the top for different data exchanges.



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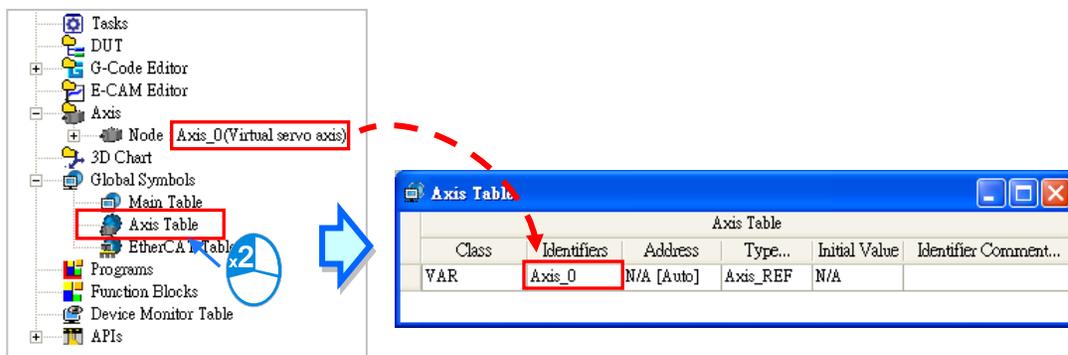


5. Newly added Main Table and Axis Table for AHxxEMC Series

Axis provides a connection between the motion control in the program and the physical output device. Axis stores various motion control information such as position, velocity and so on.

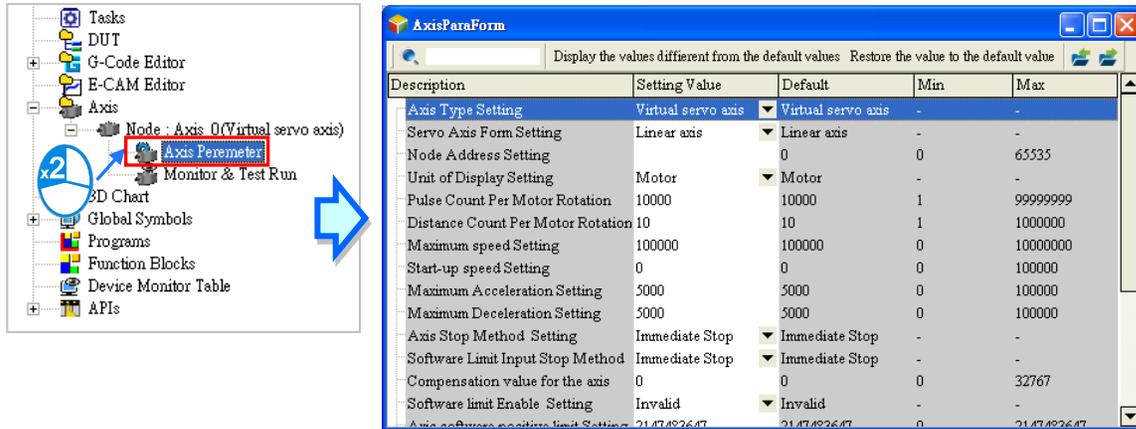
Global symbols are classified for easier management; there are different sub-items including **Main Table**, **Axis Table** and **Other Network Symbol Table** under global symbols. **Main Table**, same as the global symbols of other models, is used for editing the global symbols. **Axis Table** lists all axis variable names which have already been created. **Other Network Symbol Table** contains the symbols used in other network configuration software such as ECAT Builder. For details on other network configuration software, refer to operation manuals of the software.

After the axis is created, the identifier of the axis variable name will appear automatically in **Axis Table** under **Global Symbols**. Double-click **Axis Table** to open the **Axis Table** window.



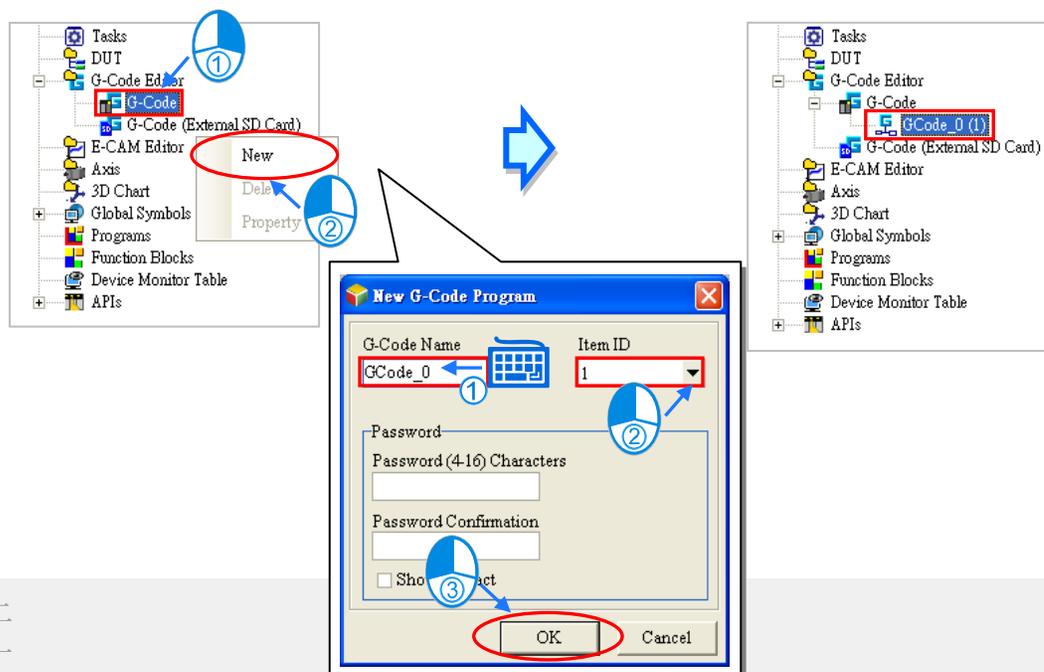
6. Newly added Axis Parameter, Monitor and Test Run for AHxxEMC Series

AxisParaForm, the parameter setting window of the axis will be opened automatically once the axis node item is created. Users can double-click Axis Parameter under the axis node item to open the AxisParaForm window once more after the window is closed. All settings on motion control of the axis are listed in the window as below. For details of axis parameters, refer to the user manuals of modules. The set values can be downloaded to the PLC with the project together after the setting is done. Refer to their relative manuals on how to upload and download the settings.

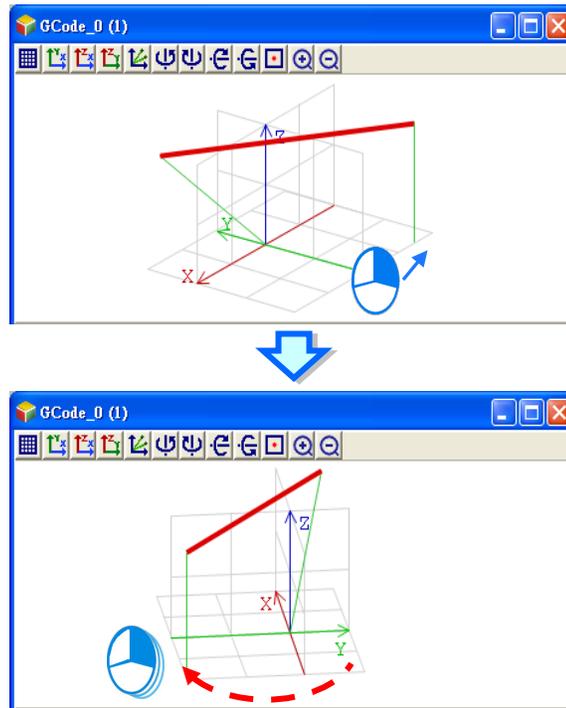


7. Newly added G-Code Editor for AHxxEMC Series

There are 2 options under the G-Code Editor, select G-Code to save the codes in the PLC and G-Code (External SD Card) to save the codes to the external SD Card on the PLC. Select one of the options and right-click the selected option and then click New to open the New G-Code Program setting window. Type a name and an item ID for this G-Code. Users can also set up a password to protect the G-Code data. When a password is set, the system will ask for the password upon next editing. Up to 32 sets of G-Code can be created (max. 64KB for each set) in the PLC and up to 128 sets of G-Code can be created (max. 2MB for each set) in the external SD card.



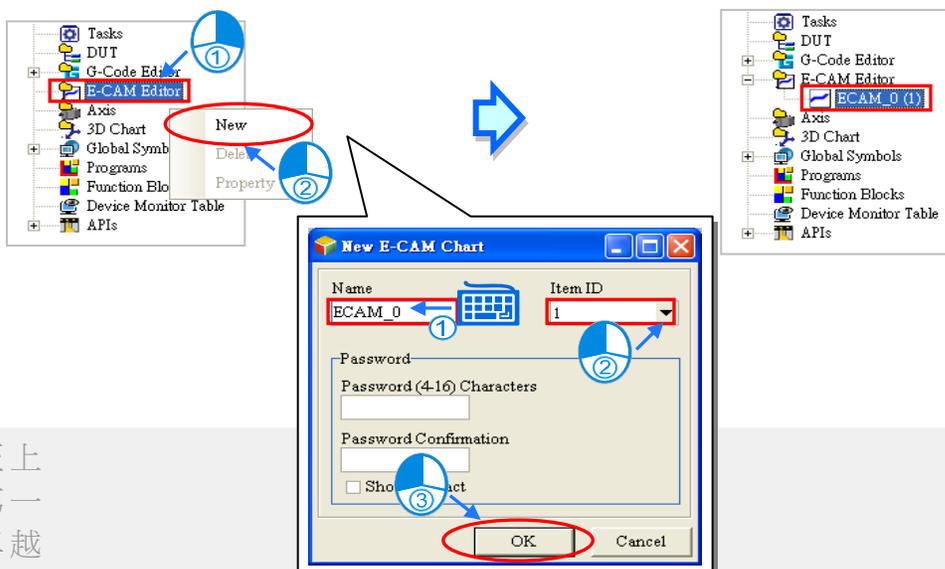
While writing a G-Code in the programming area, the current drawing G-Code will be shown in red in the toolpath view area. Users can right-click, hold and drag the mouse to rotate the toolpath in the toolpath view area.



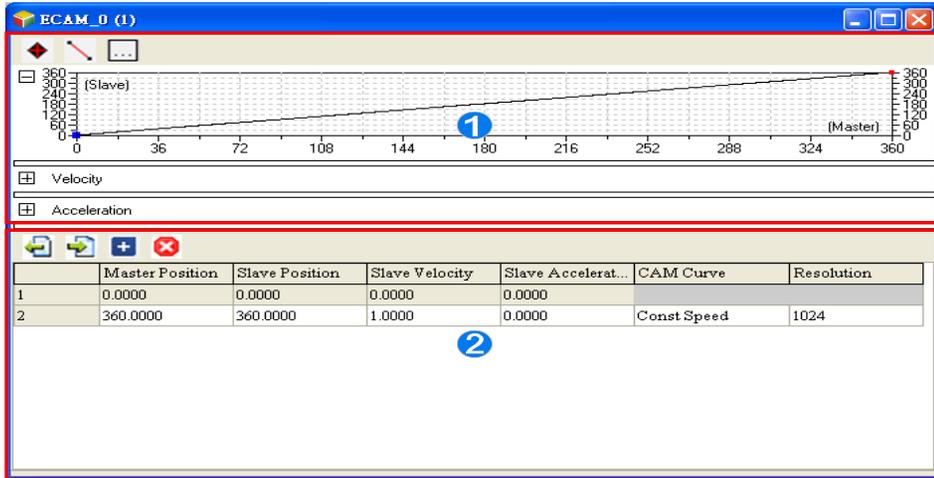
8. Newly added E-CAM Editor for AHxxEMC Series

An E-CAM is to use a cam chart to define the relation between a follower and a cam to simulate the movements of a cam controlled by a PLC, making a slave axis to move by the master axis according to their defined relation. The benefit of using an E-CAM is that users can modify the electronic cam data in an electronic cam in software. Users do not need to modify the mechanical design and no concern on the machinery wear and tear.

Right-click the E-CAM Editor in the project management area and then click New to see a New E-CAM Chart setting window. Type a name and an item ID for this chart. Users can also set up a password to protect the E-CAM data. When a password is set, the system will ask for the password upon next editing. Up to 32 sets of E-CAM can be created.

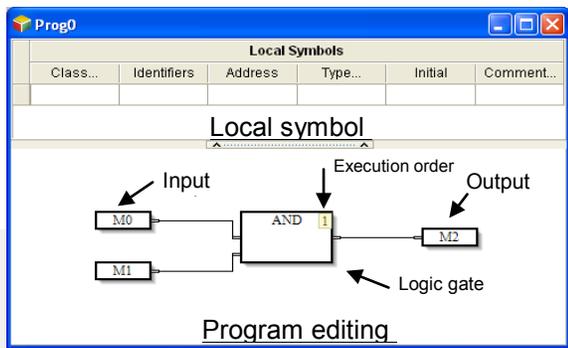


Users can click the Insert a point icon  and then click where they'd like to add the data point on the chart. The new data point will be added on the chart and the relative data will be shown in the Data setting area simultaneously. Up to 20 rows can be added.



9. The online program monitoring function is enhanced: the updating speed is improved while performing multi-pages program monitoring.

10. ISPSOft V3.02 supports Continuous Function Chart (CFC) programming language for AS300 series. (For detailed illustrations on the CFC programming, please refer to the ISPSOft User Index in the Help section of ISPSOft.)



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11. ISPSOft V3.02 supports EIP Tags for AS300 series.

- There are 2 kinds of EIP Tags, including the Produced Tag and Consumed Tag. Symbols in the EtherNet/IP Table can be used the same way as the global symbols can be used. For the creation and usage of a symbol, please refer to the ISPSOft User Index in the Help section of ISPSOft.
- Once the definitions of the Produced Tag and Consumed Tag are complete, the specified EIP tags will also be downloaded with PLC programs to the PLC. As for the data exchange through the EIP tags in the PLC, it can be done with the EIP Builder. Please refer to the EIP Builder manual for further instructions.



12. ISPSOft V3.02 adds a High Speed Counter tool for AS300 series.

- The high speed counter tool allows users to select the number of the corresponding high speed counter based on the type of the high speed counter, format of the value to be counted and input point number so that DCNT instruction can be set quickly.
- Double-click DCNT instruction in the ladder diagram to open the High Speed Counter Setting window as the image shown below. (For detailed illustrations on the High Speed Counter Tool, please refer to the ISPSOft User Index in the Help section of ISPSOft.)



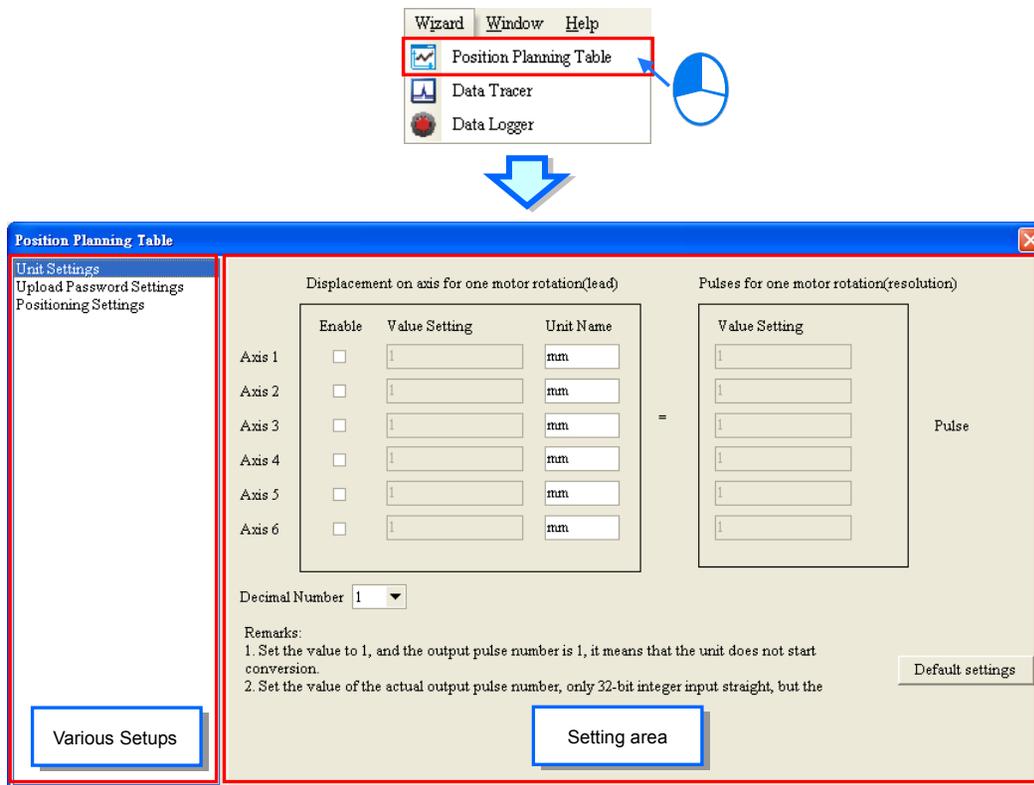
Type	Hardware - 1 Phase 1 Input	HC200 ~ HC222
Input Point:	X0.0	Counter: HC200
Arrival Value	D	100
Increasing/Decreasing Input: X0.0 RESET: X0.12		

13. Four new instructions, including DSPD, PWD, MPG and DPPGB are added for AS300 series. For detailed descriptions, please refer to the attachment.

14. Position Planning Table for AS300 series

- ISPSOft V3.02 provides an easy table for users to set up the single-axis or 2-axis motion control. It is not required for users to know the complicated motion control rules to complete the setup. Create and download a position planning table and then along with the instructions, the PLC can output axis motions in the set number and order accordingly.

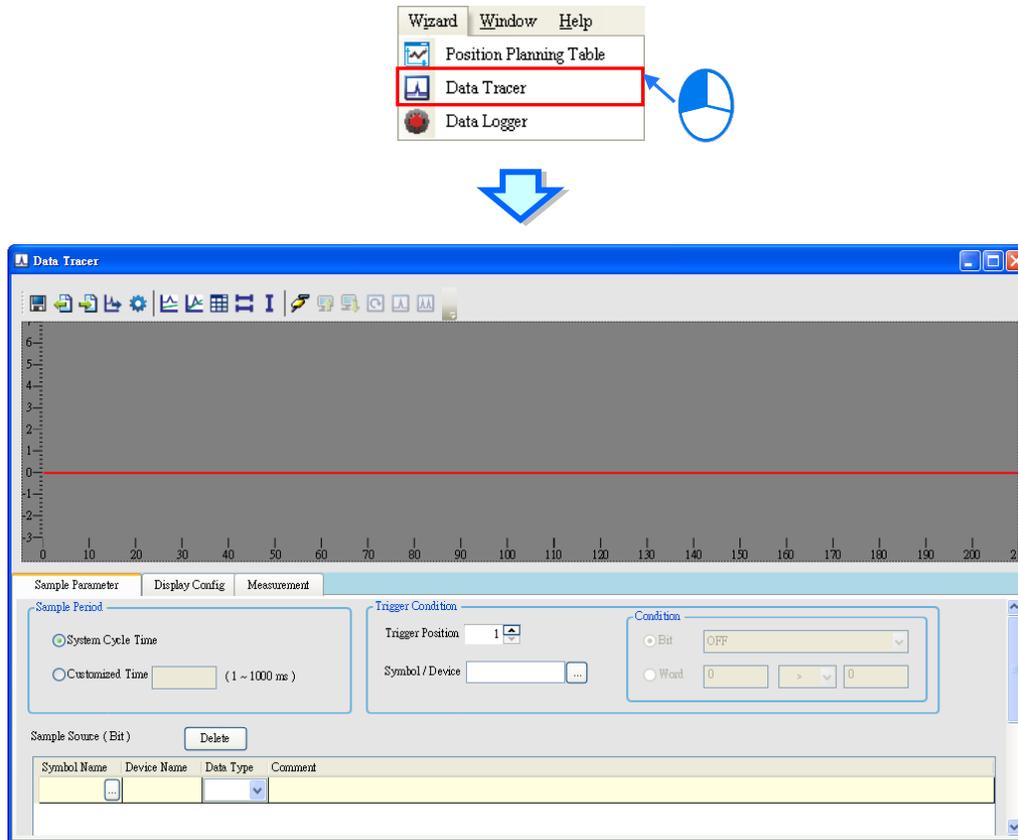
Click **Wizard (!) > Position Planning Table** on the tool bar to open the **Position Planning Table** window as the image shown below.



15. Data Tracer for AS300 series

- Data Tracer is used for the real-time collection of variable symbols or values or states in devices after some trigger condition is met so as to draw curve charts for analysis of value trends.

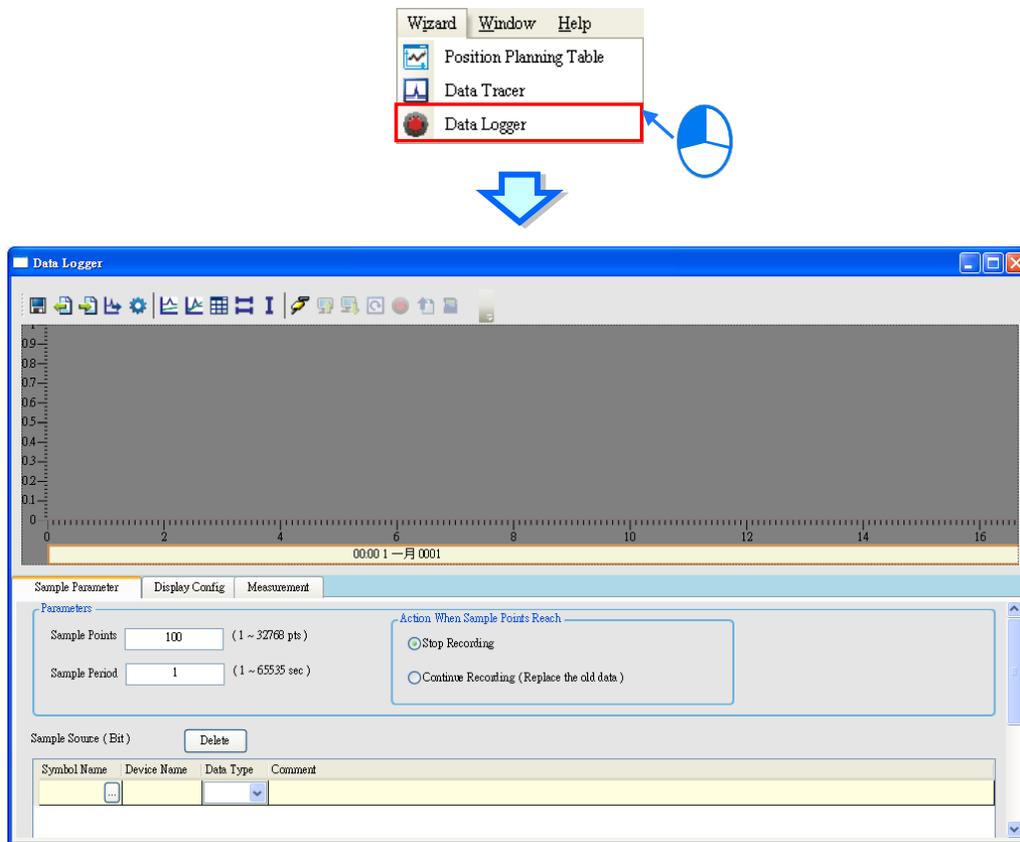
Before using this functionality, users need to complete the programming for the current project. Click Wizard (!) > Data Tracer on the tool bar to open the Data Tracer setup window as the image shown below.



16. Data Logger for AS300 series

- Data Logger can be used to collect the long-term records of the variable symbols or values/states of a device to create a diagram of curve for users to analyze.

Before using this functionality, users need to complete the programming for the current project. Click Wizard (!) > Data Logger on the tool bar to open the Data Logger setup window as the image shown below.



17. User-defined Data Type (UDT) / Data Type Unit (DUT)

- Sometimes basic data types are not sufficient for users to write their own programs for the PLC. In the IEC 61131-3 standard, a high-level language such as the user-defined data type is adopted to create a new data type as users desired, allowing users to define their own variables and improving the readability and the efficiency of developing a program.

(1) Structure: a structure is the collection of data, consisting of same amount various data types. Structured or array elements can be elements for other structures. A structure is used for grouping data and can be seen as a data unit to transfer parameters.

(2) Enumeration: users can enumerate the elements in a collection of objects, providing an efficient way to define a set of named integral constants that may be assigned to a variable and values that the enumeration represents.

*Please note for the time being AS300 series and AH10EMC models are only available for Taiwan and China. AS300 series and AH10EMC models will go global November 2016 and January 2017 respectively.

Download the software at

<http://www.deltaww.com/services/DownloadCenter2.aspx?seclD=8&pid=2&tid=0&CID=06&itemID=060301&typeID=1&downloadID=,&title=-- Select Product Series --&dataType=8;&check=1&hl=en-US>