

Intuitive Programming Software Environment

- 1. **Toolbar & Shortcut:**
Icon-based organized design, enables users to operate what they want efficiently
- 2. **Project Explorer**
Divide functions into 3 categories, collapsible, space-saving
- 3. **Screen List:**
Screen preview allows users to access a specific screen quickly
- 4. **Screen Workspace:**
What You See Is What You Get
- 5. **Tab Page:**
Switch view effortlessly
- 6. **Memory Address:**
View the status of memory usage



- 7. **Object List:**
Trace every object that the user creates currently
- 8. **User Toolbox:**
Drag the customized object into this area, and then you can use it anytime, everywhere
- 9. **Output Message:**
Compiling result will be displayed here. Double clicking the error message leads users to review the setting directly
- 10. **Screen Toolbar:**
Adjust the proportion of the screen and simulate the displaying status of the objects
- 11. **Ribbon Style:**
Change the default color scheme from several Ribbon styles
- 12. **Toolbox:**
Wide variety of useful, elegant objects to utilize

Topic 1 Different Ribbon Style, Different Arrangement of Workspace



Topic 2 Use Wizard to Complete Project Setting in Three Steps

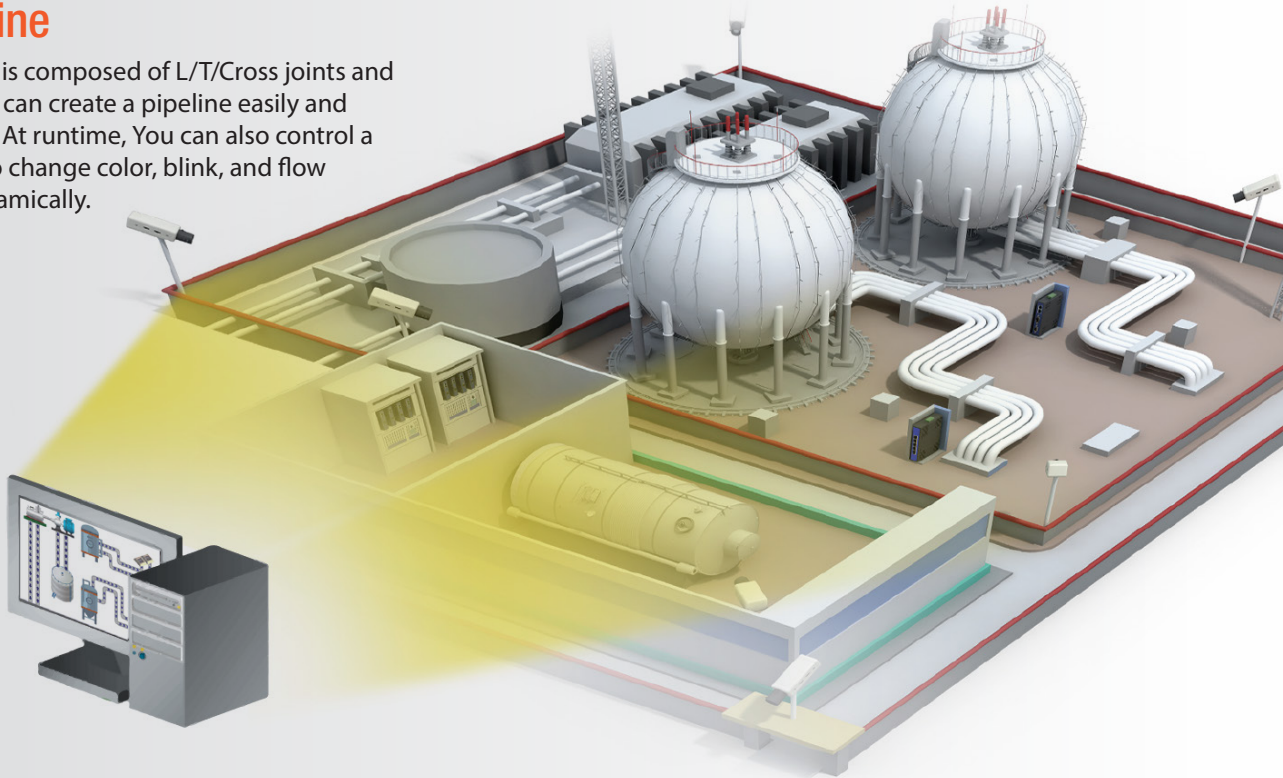


EasyEasy Planning and Rich Resources



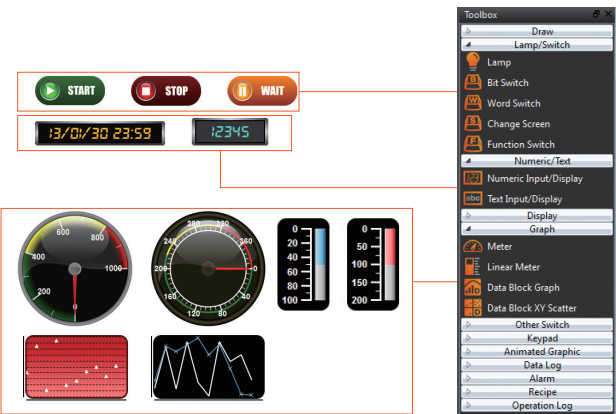
Pipe Line

A pipeline is composed of L/T/Cross joints and pipes. You can create a pipeline easily and efficiently. At runtime, You can also control a pipeline to change color, blink, and flow effect dynamically.



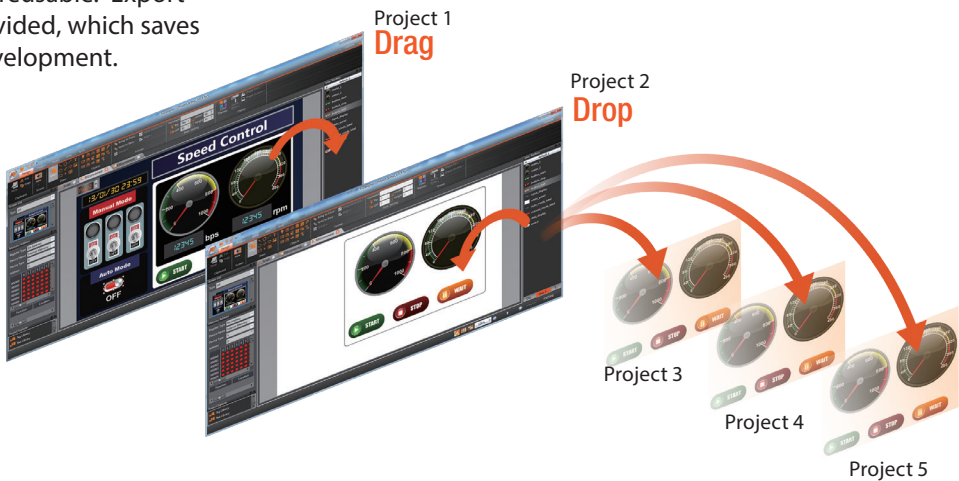
Toolbox

- Provides many useful objects like shapes, meters, charts, buttons etc.
- Utilize them from the Toolbox section to speed up the design time



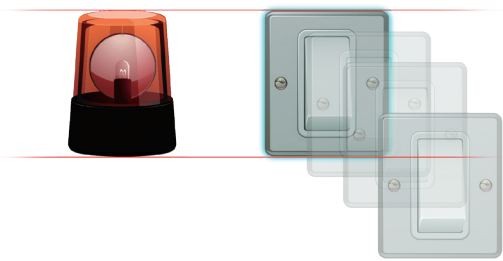
User Toolbox

Drag user-defined objects into User Toolbox section, and these objects would become reusable. Export and import functions are also provided, which saves valuable time during program development.



Automatic alignment

Support snap alignment and grid alignment functions, and assist users to design faster and more conveniently.



User-defined Keypad

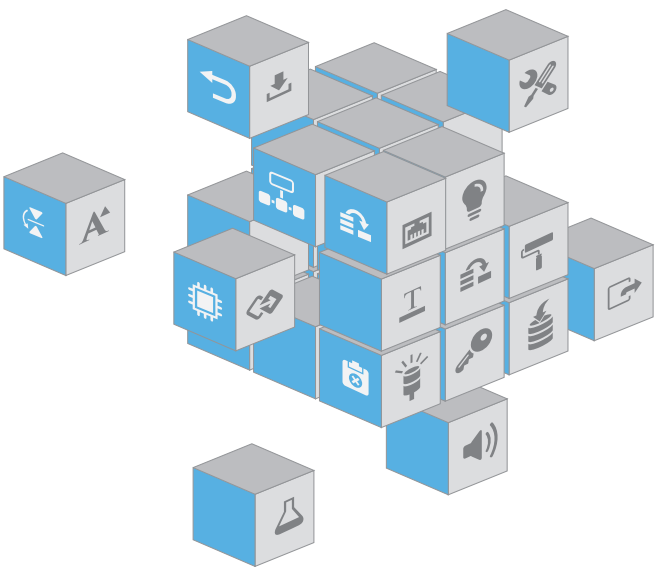
Can customize the style of the keypad, supports unicode string input.



Resources

Support a plentiful of resource libraries that allow users to customize the content and apply it to any project applications.

- Image Library: Thousands of industrial images to choose from, or import your own images.
- Audio Library: Use the Audio Library to play the sound you like when an alarm happens or a button is clicked.
- Font Library: The capacity of font files is minimized, thus minimizing memory usage.
- Text Library: Multi-language support satisfies your requirement of localization. You can even change the language setting dynamically at runtime.
- Tag Library: Make abstract address's text easy to be understood for system planning.

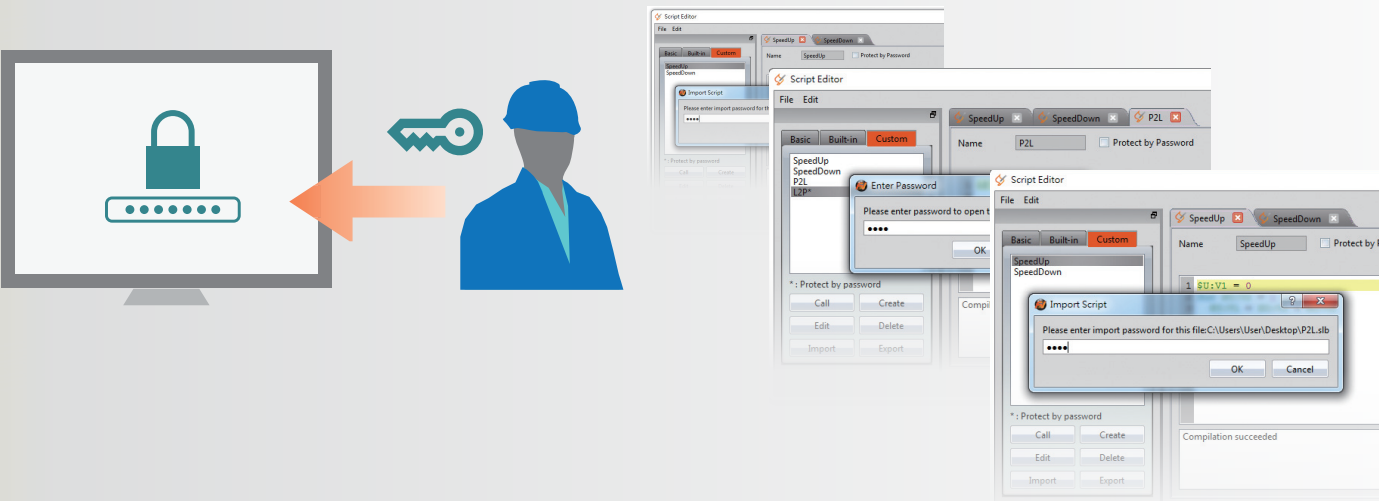


Security and Safety Control



Intellectual Property Rights Protection

- The project can be protected by the password and it requires password verification for users to edit the file.
- Password protection supports download/ upload of the project, system setting and update of MERITEK PLC program via USB flash disk.
- Provides internal register for users to change passwords directly and customize startup screen easily.
- The script allows you to design custom functions for your customers. You can also set passwords to these custom functions, so that your customers will be requested to enter passwords when they want to use them or see the source code

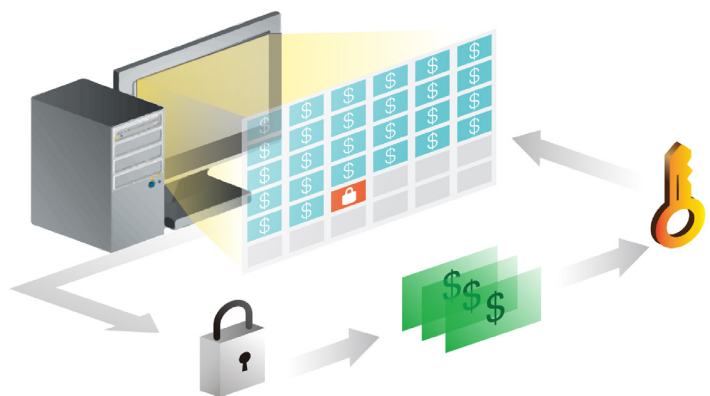


Update User Accounts / Passwords Via External Storage

To add or edit user accounts on a device can cause headaches for production managers. By Function Switch, the FvRT allows users to change user accounts and passwords via external storage.

On-Off Delay

For preventing mistakes in operations, you can set minimum hold time for buttons and switches or operators have to double press the objects to execute the operation.

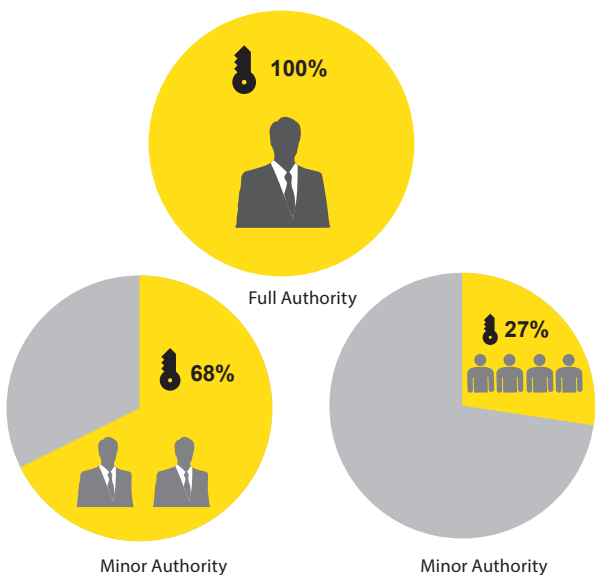


Pay by Installments

- Static mode provides up to 48 periods, and each deadline can be different intervals between each one.
- Provides runtime modify function for set up machine without re-downloading project.
- Dynamic mode does not need to decide expired date in advance.
- Just use the key and the password generator to generate a password that contains the next expiration date.

Security

- Security function provides 16 access levels and 100 user accounts, and each level and user can have different passwords; import and export functions are provided, increasing flexibility and convenience.
- For security control, operations for switches, buttons and inputs are banned if operators input incorrect password; objects on screen can even be hidden if operators have no privilege to see the objects.



Alarm, Trend, Data Log, E-mail, Camera

Step1:

Use the Alarm function to set the threshold value for monitoring system status.

Step2:

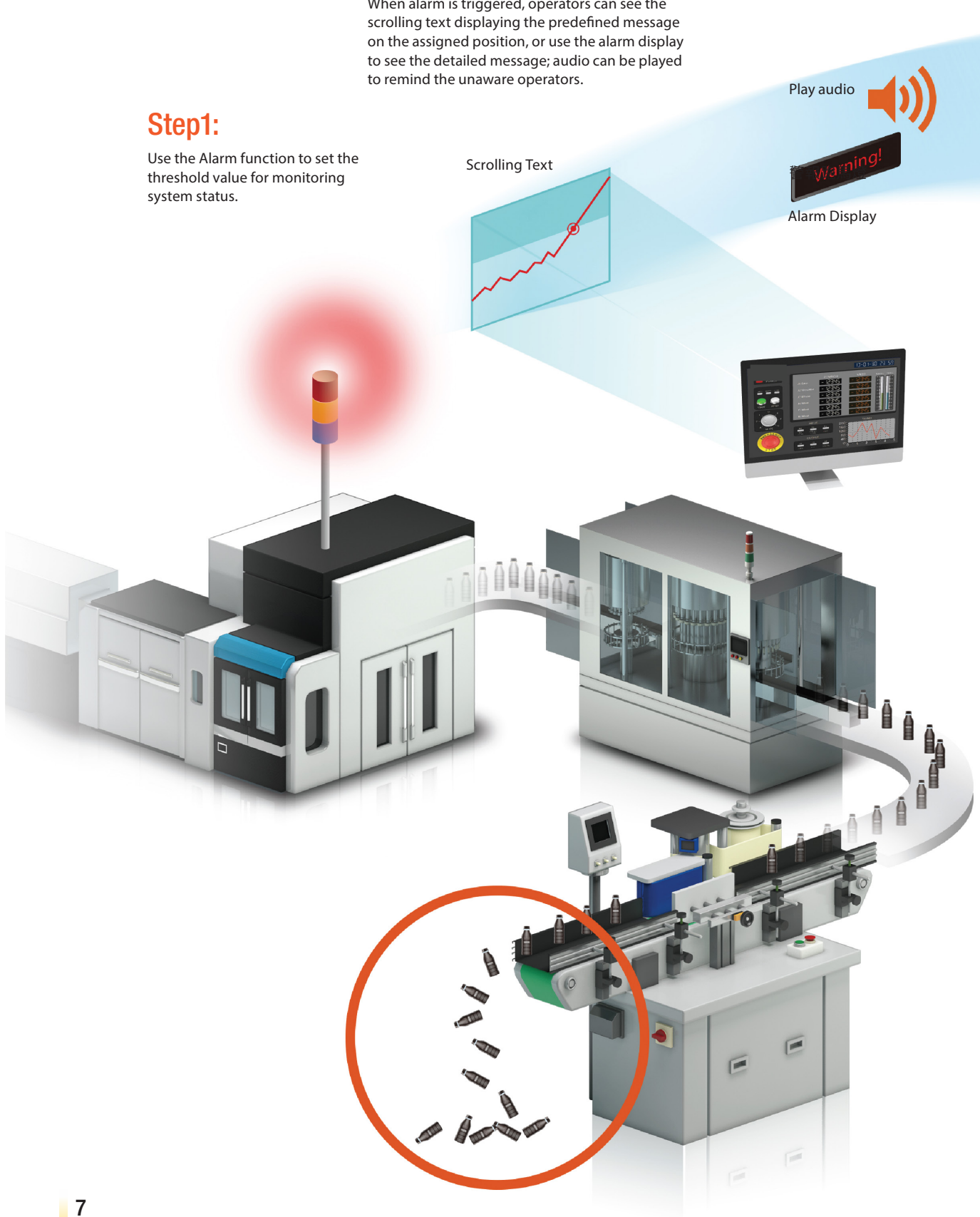
When alarm is triggered, operators can see the scrolling text displaying the predefined message on the assigned position, or use the alarm display to see the detailed message; audio can be played to remind the unaware operators.

Step3:

Pop up the child window to get a further message or for post-processing.

Step4:

User can also receive the email that attached the alarm information and the captured camera image on site. Then review the history records of Data Log and Operation Log for root cause investigation.



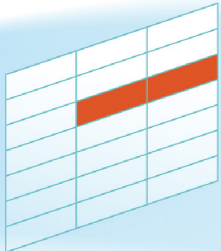
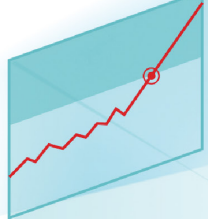
Play audio



Warning!

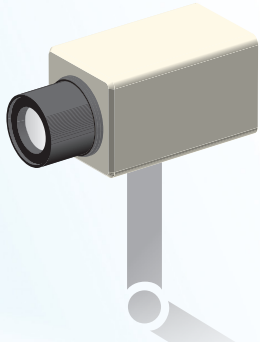
Alarm Display

Scrolling Text



Popup window

Camera



Email

- Send important messages to recipients through triggered alarm.
- Can configure the contact lists and groups, easy to assign recipients.
- Provide SSL/TTL encryption mechanism to ensure file security.

Camera

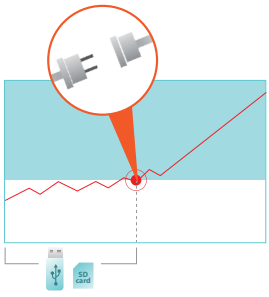
- Support USB camera input and display images directly on the monitor.
- Can capture the image and save to the USB storage or send the site image via email.



Users can receive emails that contain alarm information and captured images from the site.

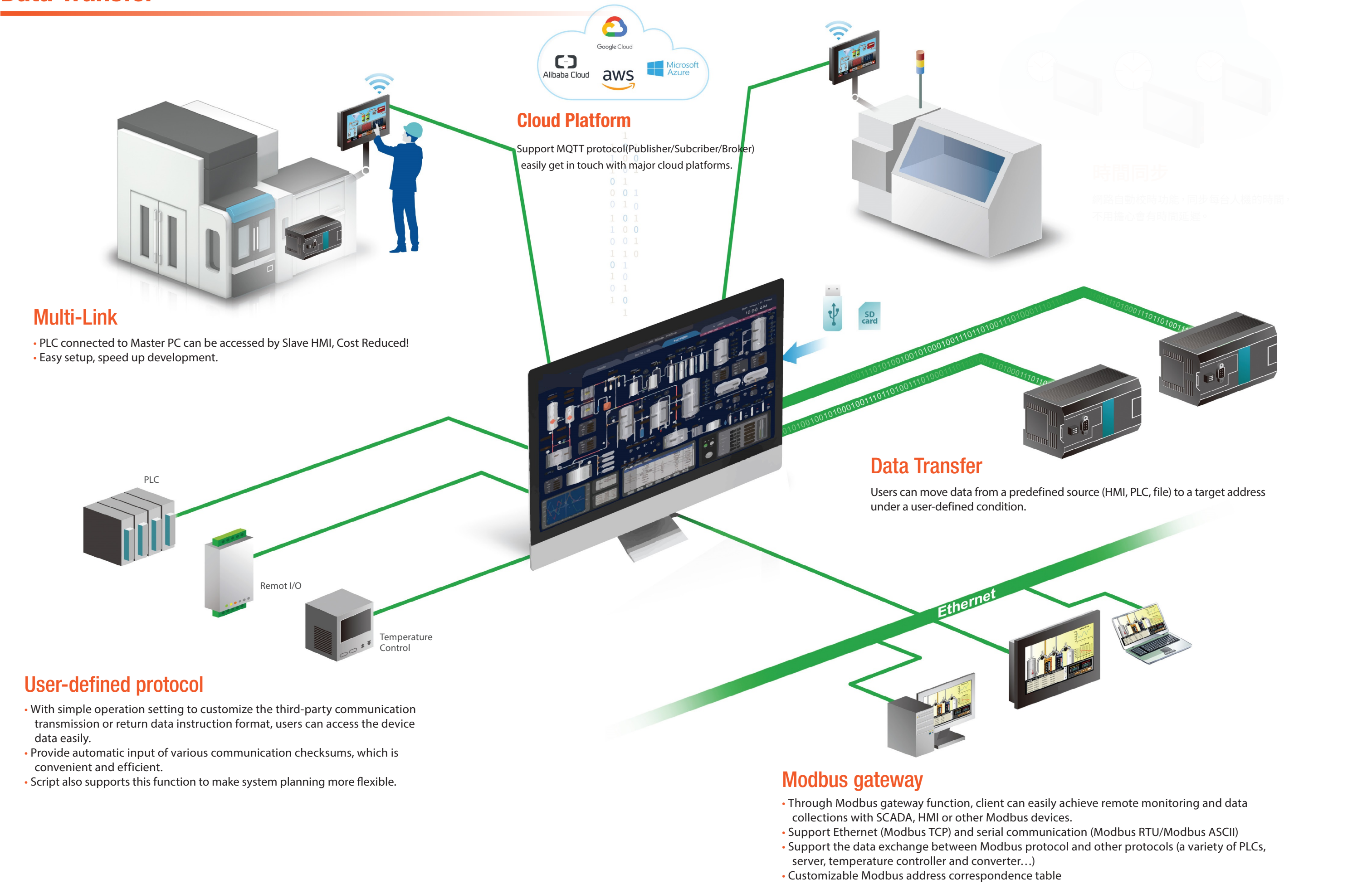
Data Log

- A maximum of 64 Data Log groups
- Each group can monitor a maximum of 512 addresses
- You can use the trend chart to observe the variance of data; a user is capable of clearing, zooming in/out, moving left/right/top/down the chart on screen, creating a chart with two Y-axes on screen. Or use historic data table to see the overall information in real-time
- You can decide the event for triggering the data logging and the time interval for every occurrence. Export and import data log as you need
- The source of data set can come from different controllers



- The data from Data Log, Alarm and Operation Log can be exported to the assigned location automatically(HMI, microSD card, usb).
- Or enable the ability of data retention in the Data Log, Alarm, Recipe and Operation Log function, and there is no need to worry about the data loss even when power failure happens.
- By combining with the Schedule and Script function, the backup timing can be triggered whenever the user wants.

Data Transfer



User-defined protocol

- With simple operation setting to customize the third-party communication transmission or return data instruction format, users can access the device data easily.
- Provide automatic input of various communication checksums, which is convenient and efficient.
- Script also supports this function to make system planning more flexible.

Multi-Link

- PLC connected to Master PC can be accessed by Slave HMI, Cost Reduced!
- Easy setup, speed up development.

Cloud Platform

Support MQTT protocol(Publisher/Subscriber/Broker)
easily get in touch with major cloud platforms.

Data Transfer

Users can move data from a predefined source (HMI, PLC, file) to a target address under a user-defined condition.

Modbus gateway

- Through Modbus gateway function, client can easily achieve remote monitoring and data collections with SCADA, HMI or other Modbus devices.
- Support Ethernet (Modbus TCP) and serial communication (Modbus RTU/Modbus ASCII)
- Support the data exchange between Modbus protocol and other protocols (a variety of PLCs, server, temperature controller and converter...)
- Customizable Modbus address correspondence table

Powerful Programming Features

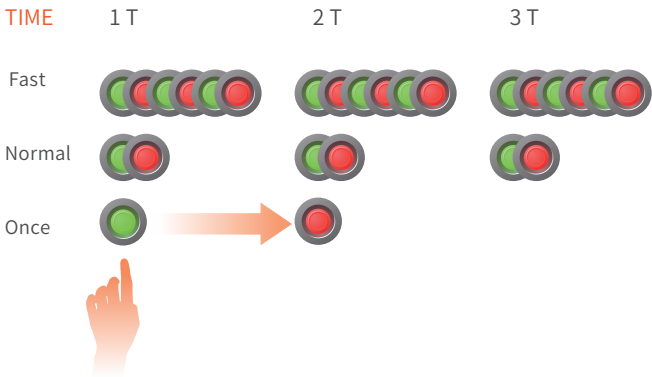
Script

- User can flexibly use Script to complete a complex task that cannot easily be accomplished with general objects. The Script functions include logical judgments, numerical computations, loop executions, string manipulation, communications between devices etc.
- Support user-defined functions, which can be imported and exported for the usage of future project designs, making it time-saving and adding flexibility
- Real-time display compiling result by which the user can correct contents immediately
- Provide password protection for engineers to protect their intellectual property

```
Timer Delay Time 5000ms
f $T:Current_Temperature <= 30
  $T:Add_Temperature = 1
  $T:Turbine_Speed = $T:Turbine_Speed + 5
endif
```

Fast Update

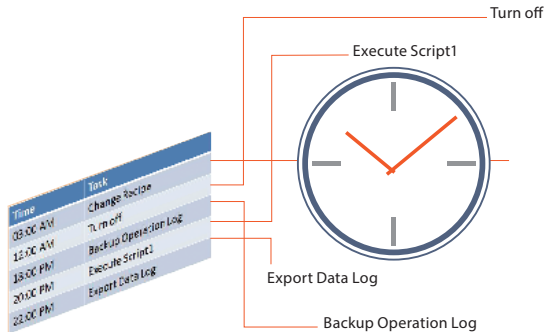
Provides users in different situations to select the update speed to get the latest data.



It will update when it was triggered or the screen has changed.

Schedule

Up to 64 schedules could be set. This function allows users to trigger event at a predefined time, or change schedule date at runtime. The event includes setting/resetting a bit, writing a word and executing script.



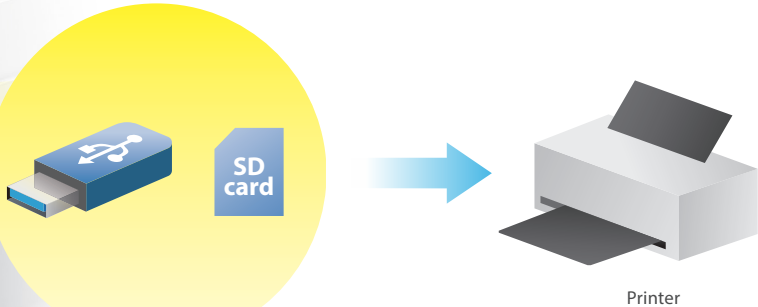
Recipe

- With Recipe function, you can store a set of verified data in PC, and download to PLC whenever necessary
- The recipe data can be from a csv file, so operators do not need to enter parameters manually
- A built-in recipe editor for users to edit the contents
- Useful Recipe objects for users to choose from
- Add/Edit recipe at runtime

	Milk	Water	Butter	Chocolate	Flour	Yeast	Egg
Cake1	50	75	1.3	2	100	0.1	2.4
Cake2	40	100	0.7	1	200	0.05	1.2
Cake3	50	60	0.6	2	120	0.13	0.8

Print function

- The project image can be printed and stored .
- The image range is selectable, and the image can also be rotated and reversed.
- User can use Function Switch or a Script to print out the screen image, and also can cancel your printing if needed while the printing is under progress.



FvRT Model	Specification
IGU-FvRT-0075-L002-B	75 I/O Tags , 2Links
IGU-FvRT-0150-L002-B	150 I/O Tags , 2Links
IGU-FvRT-0600-L006-B	600 I/O Tags , 6Links
IGU-FvRT-1200-L012-B	1200 I/O Tags , 12Links
IGU-FvRT-1500-L016-B	1500 I/O Tags , 16Links
IGU-FvRT-3000-L016-B	3000 I/O Tags ,16Links
IGU-FvRT-5000-L016-B	5000 I/O Tags , 16Links
IGU-FvRT-9999-L016-B	9999 I/O Tags , 16Links
IGU-FvRT-16000-L016-B	16000 I/O Tags , 16Links
IGU-FvRT-26000-L016-B	26000 I/O Tags , 16Links
IGU-FvRT-40000-L016-B	40000 I/O Tags , 16Links
IGU-FvRT-64000-L016-B	64000 I/O Tags , 16Links
ADD 1 Link	Add 1 Link
ADD 300 I/O tags	Add 300 I/O tags