Product Specification

Delta Electronic Industry Co, Ltd

Product	DIAView	Edition	4.2.0	Confidentiality Level	Common
				ECN	N/A

1. General Specification	
1.1 CPU	Main frequency:2GHz and above
1.2 Memory	4GB and above
1.3 Hard Disk	20GB and above
1.4 Monitor	Resolution 1024 x 768 and above
1.5 Operating System	Windows 8 32/64 bit (Profession/Ultimate/Enterprise)
	Windows 10 32/64 bit (Profession/Ultimate/Enterprise)
	Windows 11 64 bit (Profession/Ultimate/Enterprise)
	Windows Server 2008 R2 SP1 64 bit
	Windows Server 2012 64 bit
	System Language: Simplified Chinese, Traditional Chinese, English
1.6 Operating Platform	Need to install Microsoft.NET Framework 4.5.2 and above
1.7 Browser	Chromium (version 45 and above) browser is required, Chrome is recommended
1.8 Database	SQL Server 2008 R2 and above, SQLite
1.9 System Permissions	Runtime must have administrator privileges
2. Software Information	
2.1 Software Architecture	Stand-alone，C/S，B/S
2.2 Communication Mode	TCP/IP
2.3 Language Version	Simplified Chinese, Traditional Chinese, English
2.4 Licensing Methods	USB Interface Dongle
2.5 IO Tags Level	64/128/256/512/1000/1500/3000/5000
2.6 Client Number	5/10 clients
2.7 Charging Method	Charge by I/O points and number of clients, additional charges for special functions (free during development and free trial for 2 hours during operation)

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QUALITY
RELIABILITY
EXCELLENCE

3. Project Management	
3.1 Project Basic Operation	New, Open, Delete
3.2 Project Backup and Recovery	Support
3.3 Project Encryption	Support
3.4 Project Rename	Support
3.5 Statistics for IO Tags and Variable Tags Number	Support
3.6 Find out Project Path	Support
3.7 The Picture Window Auto-run When Computer Power on	Support
3.8 Picture Self-adjusting Full Screen	Support
3.9 User-defined Layout of Windows	Support
3.10 Restore Layout of Windows	Support
3.11 Upgrading Dongle	Support
3.12 Project Packaging	Support
3.13 Project Template Function	Support
3.14 Secondary authorization	Support

4. I/O Communication	
4.1 Scanning Cycle	Default:500ms (set the minimum time to 50ms and support grouping)
4.2 Communication Timeout	Default:3000ms
4.3 Number of Retry	Default:3
4.4 Reconnect Delay	Default:30s
4.5 Reconnect Time	Default:0min, Keep trying connecting, User-defined.
4.6 Connection Type	Serial port, Ethernet, USB and so on

4.7 Communication Driver	1、Modbus TCP、Modbus RTU、Modbus ASCII 2、OPC DA Client、OPC UA Client 3、Delta MQTT Client 4、FINS TCP、FINS UDP、FINS ASCII、HostLink ASCII、N EthernetIP Tag 5、Delta AX OPC UA、Delta AX PLCHandler、Delta AS MC TCP 、Delta ES3 TCP 、Delta AS TCP、Delta AS RTU、Delta AS ASCII、AH Modbus TCP、AH Modbus Serial RTU、AH Modbus Serial ASCII、DVP Modbus TCP、DVP Modbus Serial RTU、DVP Modbus Serial ASCII、DVP MC TCP 、Delta DOP TCP、Delta DOP RTU 、DIALink PLC、DIALink 6、Mitsubishi FX Serial、 Mitsubishi ProFX Serial、 Mitsubishi Q Serial、 Mitsubishi Q EtherNet、 Mitsubishi FX EtherNet、Mitsubishi iQ-R EtherNet、Mitsubishi Q Mc4E 7、 Siemens S7300 TCP、S71200 TCP、S71500 TCP 、S7300 MPI、S7200 TCP、S7200 PPI、S7200 Smart TCP 8、Delta Power Meter DPM-C530 Ethernet、DPM-C530 Serial 9、Rockwell ControlLogix Ethernet 10、Keyence SR2000 TCP、Keyence SR2000 COM、Barcode Scanner USB HID、Barcode Scanner TCP、Barcode Scanner COM 11、Yaskawa MP3000 TCP、Yaskawa MP3000 UDP 12、Inovance AM400 TCP 13、Printer TCP、Printer USB、Printer COM
4.8 Support Driver Device	Modicon、OPC、MQTT、Simulator、Omron、Delta、Siemens、Mitsubishi、Rockwell、Delta Power Meter 、Yaskawa、Inovance、Barcode Scanner、Barcode Printer
4.9 Maximum New Address Num.	5000
4.10 Troubleshooting	Support
4.11 Connection Status Testing	Support
4.12 Communication Status Feedback	Support
4.13 Device Dynamic Start-Stop	Support
4.14 Device Batch Add	Support

4.15 Parameter Dynamic Modify	IP, Port, COM Port, Baud Rate and other Parameters
4.16 IO Server Obtain Data	Off-time, Connecting Time, Scanning Time, Timeout, Retry Times, IP and Mac Address
4.17 IO Address Point Search Location	Support
4.18 MQTT Publisher Service	Support
4.19 OPC UA Server Service	Support (Up to 10 clients supported)
4.20 WebAPI Service	Support
4.21 Device Copy and Paste	Support
4.22 Maximum Series Ports	32
4.23 Import Tag From DIAStudio Designer/Designer-AX to IO Variables.	Support
5. Variable Dictionary	
5.1 Variable Type	Analog, Digital, String, Struct Data Type
5.2 Variable Group	Support
5.3 Maximum Variable Number	Unlimited
5.4 Maximum Batch Add Number	100,000
5.5 Variable Export Import Excel	Support
5.6 Variable Group Export Import Excel	Support
5.7 Variable Disconnection Hold	Support
5.8 Variable Reference Browse	Support
5.9 Variable Group Copy	Support
5.10 Variable Statistics	Support
5.11 Variable Intelligent Search and Substitution	Support
5.12 Variable Filter Query	Support
6. History Variable	
6.1 Variable Record Support Database	SQL Server, SQLite
6.2 Variable Record Storage Pattern	Timing Record, Changed Record
6.3 Timer Regulation	Data Record Time Interval, Default: 1s, 10s, 30s, 1m, 30m, 1h, Customizable storage cycle

6.4 Variable Group report Database	SQL Server (Default), SQL Server Compact, Oracle, MySQL, SQLite
6.5 Variable Group Record Storage Pattern	General Storage, Subtract Storage
6.6 Variable Group Record Trigger Condition	Timing, Changed

7. Database Access

7.1 Database Type	SQL Server (Default), SQL Server Compact, Oracle, MySQL, SQLite
7.2 The Maximum Limit of The Database	Restricted by the third party database. The storage: SQL Server Compact (4G), SQL Server2008 and previous Express edition (4G), SQL Server 2008 R2 and later Express edition (10G), SQL Server payment edition(unlimited), Oracle(unlimited), MySQL(unlimited), SQLite(2TB)

8. User Authorization

8.1 Authorization Type	SystemAdmin, Admin, Operator, Custom user type
8.2 System Administrator Authority	The default existing in the project, the highest authority. Each project has only one administrator which cannot be deleted.
8.3 Manager Authority	Set the operation authority of the safe zone, add, modify, delete the operator messages.
8.4 Operator Authority	The operator is for the common project operator. The operation authority can be modified by setting the security zone
8.5 The Security Zone Browse	Support
8.6 User and Password Expiration Policies	Support
8.7 Password Lock Function With Multiple Incorrect Input	Support
8.8 User login mode	Password login、Face recognition login

9. User Program

9.1 Script Type	The Condition Script, The Timing Script, The Global Function
9.2 The Condition Script Trigger Mode	Value Changed, While True, While False, Value Holding True (On True), Value Holding False (On False)
9.3 Timing Script Trigger Mode	Start, Stop, One-time, Continue, Weekly, Monthly
9.4 Timing Script Grouping	Maximum number of groups 128
9.5 Condition Script Grouping	Maximum number of groups 128
9.6 Global Function Method Type	Sub, Function
9.7 Global Function Reference Browse	Support
9.8 Function Module Encryption	Support

9.9 Function Module Import and Export	Support

10. Picture Window

10.1 Window Grouping	Support
10.2 Window Template Function	Create a new window from a template, save as a window template, manage window templates
10.3 Window Background Color	Monochrome, Pattern, Picture, Gradients, Radiation
10.4 Window Background Color Transparency	Support
10.5 Window Import and Export	Support
10.6 Window Copy and Paste	Support
10.7 Window Pan	Support
10.8 Window Zoom and Recovery	Button Zoom and Shortcut Key Zoom (Ctrl + Mouse scroll)
10.9 Full screen editor	Support
10.10 Screen window mesh adsorption	Support
10.11 Windows Ruler	Support
10.12 Windows Grid Type	Support
10.13 Window Program Type	Opening, Running, Closing, WindowFunction
10.14 Window Shortcut Events	Single Window Shortcut Events, Global Window Shortcut Events
10.15 Window Object Type	Basic Graphics, Window Controls, Extended Controls
10.16 Window Object Animation	Value View (Analog, Analog String, Discrete, Text), Rotation, Move, Zoom, Skew, Visibility, Blink, Fill, Stroke, Brush, Text color, Flow (just for pipe), Extension Property Animation
10.17 Window Object Event	Leftbutton, Rightbutton, Mouse, Window Operation, Value Input (Analog, Discrete, String, Button), Rotation-Input, Slide-Input, Keyboard, Control (Checked, Unchecked, SelectionChanged, TextChanged, PasswordChanged, ValueChanged, SelectedDateChanged)
10.18 Basic Operation of Window Object	Copy, Paste, Cut, Undo and Redo, Rotation, Size, Stretch, Align, Layer, Distribute, Group, Skew, Zoom, Translation
10.19 Picture Object Format	JPG/GIF/PNG/BMP/JPEG/EMF/WMF
10.20 Window Object Operation Shortcut	Support
10.21 Window Full Screen Print and Save	Support
10.22 Basic Graphics	Line, Rectangle, RoundedRectangle, Ellipse, PolyLine, Polygon, BezierCurve, ClosedCurve, Arc, Arch, Pie, Pipe, Text

10.23 Window Controls	Button, Checkbox, Combobox, Label, Textbox, PasswordBox, DiscreteIndicator, AnalogIndicator, DateTimePicker, DatePicker, Calendar, Image, GIFImage, Panel, NixieTube, CurvedRuler, Table, UniBarcode, QRCode
10.24 Extended Controls	RealtimeChart, HistoryChart, TrendChart, XYChart, CustomChart, PieChart, PieChart3D, ColumnChart, HistoryColumnChart, RecordBox, AlarmWindow, ScrollAlarm, Report, RecipeBrowser, Ruler, CircleGauge, VideoMonitor, RTSP VideoMonitor, WebBrowser
10.25 Quick Controls	MomentaryButton, MaintainedButton, SetONButton, SetOFFButton, IncrementButton, DecrementButton, Persistent Button
10.26 Number of gallery graphics	1000
10.27 Draw Lines, Pipes, and Polylines at Special Angles	Support to draw the angle with the multiple of 15 degrees (Shift + Mouse move)
10.28 Find and Replace Window	Support
11. Web Picture Window	
11.1 Window Object Animation	Value View (Analog, Analog String, Discrete, Text), Rotation, Move, Zoom, Skew, Visibility, Blink, Fill, Stroke, Brush, Text color, Flow (just for pipe)
11.2 Window Object Event	Leftbutton, Rightbutton, Mouse, Window Operation, Value Input (Analog, Discrete, String, Button), Control events (Checked, Unchecked, SelectionChanged, TextChanged, KeyDown, KeyUp, PasswordChanged, ValueChange, SelectionDateChanged)
11.3 Basic Graphics	Line, Rectangle, RoundedRectangle, Ellipse, PolyLine, Polygon, BezierCurve, ClosedCurve, Arc, Arch, Pie, Pipe, Text
11.4 Window Controls	Button, Checkbox, Combobox, Label, Textbox, Password box, DiscreteIndicator, AnalogIndicator, DateTimePicker, Calendar, Image, InLineFrame, WindowNavigationMenu, NixieTube
11.5 Extended Controls	XYChart, CustomChart, PieChart, ColumnChart, AlarmWindow (real-time alarm, historical alarm), Report, CircleGauge, WebBrowser, TrendChart (RealtimeChart, HistoryChart), PDFViewer, AuditViewer
12. Script Editor	
12.1 Script Language	VB Script (Web module scripting language VB Script is automatically compiled into JavaScript)
12.2 Intelligent Tooltip	Support
12.3 One Click for Layout	Support
12.4 Code Highlight Display	Support
12.5 Import and Export	Support

12.6 Grammar Checking	Support
12.7 Shortcut Key Operation	Support
12.8 Chinese Code	Support
12.9 Default Value R/W Function	Support
12.10 Precise Position the Incorrect Script	Support
12.11 Find and Replace	Support
12.12 Font Editor	Support
13. Recipe	
13.1 Maximum Recipe Number	Limited by memory
13.2 Maximum Recipe Capacity	1 million (Recipe Element number * Recipe Item number)
13.3 Recipe Element Import Export	Support
13.4 Row Column Switch Display	Support
13.5 Recipe Import Export	Support
13.6 Page Manually Refresh	Support
13.7 Change Recipe while Project is Running	Support
13.8 Dynamic Setting of Toolbar	Support
13.9 Column Display Setting	Support
13.10 Table Style Setting	Support
13.11 Filtering Query	Support
14. Alarm	
14.1 History Alarm Query Mode	Hour, Day, Week, Month, User-defined
14.2 Realtime Alarm Maximum Item	10000
14.3 History and Realtime Alarm Used Simultaneously	Support
14.4 Alarm Data Automatic Paging	Support
14.5 Alarm Mode	E-mail, Sound, SMS, Wechat, IFTTT
14.6 Alarm Log	Support
14.7 Alarm Information Filter	Support
14.8 Query Time Setting	Support
14.9 Realtime Alarm Start-Stop	Support

14.10 Modify the Voice Alarm Content Online	Support
14.11 Alarm Voice Type	Silent, Buzz, System Sound, Sound File, Play Sound (User-defined)
14.12 Play Voice Ways	One-time, Continue
14.13 Ack Alarm	Support
14.14 Alarm Level	Slight, Lighter, General, Heavier, Serious
14.15 Alarm Type	Limit Value Alarm, Deviation Alarm, Rate of Change Alarm, Digital Alarm, Expression Alarm
14.16 Script Control Alarm Recovery	Support
14.17 Alarm Print	Support
14.18 Set Color by the Alarm Type	Support
14.19 Realtime and History Alarm Description	Support
14.20 Set Font Size of Realtime and History Alarm	Support
14.21 Realtime Alarm and History Alarm Altering	Support Display and Hide Setting
14.22 Alarm Display	Support alarm column name sorting adjustment, time format customization, Different Colors Display of Alarm, Recovery and Acknowledge
14.23 Alarm Export	Support single-page and all data export
14.24 AlarmSwitch	Support alarm and response jump window
15. Chart	
15.1 Chart Types	Realtime Chart, History Chart, Trend Chart, XY Chart, Pie Chart 3D Pie Chart, Column Chart, History Column Chart, Custom Chart
15.2 Realtime Refresh Time	Default 1s
15.3 History Query Minimum Interval Time	1 second
15.4 History Query Maximum Interval Time	1 year
15.5 Query Time Upper Limit	3 years
15.6 Query Time Lower Limit	1 second
15.7 Maximum Display Alarm Row	15
15.8 Data Format	Int, Float (Column chart only supports Int)
15.9 Realtime Chart Data Retention	Support

15.10 Realtime and History Chart Export into the Report Template	Support
15.11 Print	Support
15.12 Modify the Maximum and Minimum Value or Interval Online	Support（History Chart）
15.13 AxisAutoAdjust	RealtimeChart, HistoryChart, TrendChart, XYChart, HistoryColumnChart, CustomChart support
15.14 Column Number in ColumnChart	30
15.15 History Column Query Statistics	Support
15.16 XY Chart History Query, Realtime Display	Support
15.17 Chart Limit-line Setting	In the development and runtime environment, the realtime chart, history chart, trend chart, XY chart, column chart and history column chart can be set
15.18 Chart Value Position Line	Real-time chart, history chart, trend chart, XY chart, history column chart can be set for this function
15.19 History Chart Query	Inquired by the second, minute, hour, day and month.
15.20 Maximum Points Displayed in the Realtime Chart	Depend on the length of the curve and time interval
15.21 History Associated Variable	Only associated with one type of the history record or variable group
15.22 The Data Source of The History Chart	Depend on the user configuration database
15.23 History Review Function of the Realtime Chart	Support
15.24 Symbol Style	Support 7 Styles.
15.25 Symbol Text	Support
15.26 Symbol Text Position	Support
15.27 Curve Style	Support 10 Styles (FastLine, Column, Scatter, Smooth, Stepped, SplineLine, StepLine, FastLineExt, Stacked columnar, Stacked columnar100)
15.28 Multiaxial Display	Support realtime chart, history chart, trend chart, XY chart, Custom Chart, column chart，history column chart
15.29 Horizontal Vertical Axis Switch	Support realtime chart, history chart, XY chart, Custom Chart , column chart，history column chart
15.30 Horizontal and Vertical Axes Center	Support realtime chart, history chart, XY chart, Custom Chart , column chart，history column chart
15.31 Axis transposition	Support Custom Chart, Column Chart

15.32 Curve Daily Report, Weekly Report, Monthly, Yearly Report	Support Custom Chart
15.33 Realtime History Switch	Support Custom Chart
15.34 External Database Curve Display	Support Custom Chart
15.35 History Realtime Data Comparison	Support Custom Chart
15.36 Curve Template Export	Support
16. Report	
16.1 Operation Type	Similar to Excel
16.2 Data Operation	Add, Delete, Change, Query
16.3 Insert Image into Report	Support
16.4 Realtime Data Binding	Support
16.5 Realtime Data Binding with System Time	Support
16.6 History Data Query	Support
16.7 History Alarm Query	Support (Display up to 65535 pens)
16.8 System Event Query	Support
16.9 Operation Variable Grouping Query	Support
16.10 External Database Query	Support
16.11 History Data Filter	Support the function of maximum, minimum, average value and sum
16.12 Display Realtime Data of the Database	Support
16.13 Interactive Between Report and Database	Support Add、Delete、Modify、Query
16.14 Variable Binding with Cell	Support
16.15 Logical Operation	Support Add, Subtract, Multiply, Divide, and, IF and so on Logical Operator
16.16 Timing Printing and Output	Support Achieve it by the TimeScript
16.17 Maximum Export Line	65535
16.18 Maximum Query Line	65535
16.19 Statistics with Multi Columns Data	Support
16.20 Report Export Format	Excel (xlsx, xls), PDF
16.21 Print Preview	Support
16.22 Print Region Display	Support

16.23 Report Data Sorting	Support
16.24 Report Template Variable Substitution	Support
16.25 Report Template Switch	Support, Switch in the runtime by Script program
16.26 Maximum Report Template Line	1000
16.27 Maximum Report Template Column	256
16.28 Data Source	Variable Record, Variable Group Record, Database Access and so on
16.29 Basic Report Guide, OEE	Support
16.30 Query Template	Support SQL Query
16.31 Subreport Insert,Delete	Support
17. Recording Box	
17.1 All Operation and Event Query	Support
17.2 User Login and Logout Query	Support
17.3 Project Start and Quit Query	Support
17.4 Operation Variable Query	Support
17.5 User Action Query	Support
17.6 Query Mode	Last 1 Hour, 1 Day, 1 Week, 1 Month, 3 Months, 6 Months, 1 Year, 3 Year, User-defined Time
17.7 Export Query Results	Support (Toolbar button and Script)
18. Video Monitor	
18.1 Video	Support
18.2 Screenshot	Support
18.3 Replay	Support
18.4 Multi-client Access	Support
19. RTSP Video Monitor	
19.1 Live	Support (Maximum 2 groups live)
19.2 Video	Support (Maximum 1 groups video)
19.3 Replay	Support
19.4 Hold Time	15 days
19.5 Multi-client Access	Support
20. Gallery	

20.1 Existing Figure	Motor Pump Fan, Valve Vessel, Indicating Instrument, Control Computer, Universal Tool, Manipulator and so on
20.2 Gallery Capacity	Unlimited
20.3 User-Defined Gallery	Support
20.4 Extension Property	Support
21. Log Viewer	
21.1 Record Time Accuracy	Millisecond
21.2 History Log Query	Support
21.3 Log Background and Forecolor Setting	Support
21.4 Reconnection when Offline	Support
21.5 Maximum Display Items	Default 1000, User-Defined Setting
21.6 Filtering by Type	Support
21.7 User-Defined Filter Condition	Support
21.8 Log Background Highlight Display	Support
22. Global	
22.1 Runtime Multilingual Switching	Support
22.2 Runtime Multilingual Font Switching	Support
22.3 Resource Type	Strings, pictures, sounds
22.4 Multilingual Reference Browsing	Support
22.5 Customizable System Multilingual	Support (Except for the three built-in languages)
22.6 String Resource Import and Export	Support
22.7 Clean Up Unused Resources with One Key	Support
22.8 Window One-key Extraction of Multilingual	Support
23. Electronic Signature	
23.1 Database	Support PostgreSQL
23.2 Data backup	Support
23.3 Record Storage	Support
23.4 Data tamper proof	Support

23.5 User Authority	Electronic signature permission (User Management, Operate variable, Recipe write, Recipe save, Operate Window, Alarm Acknowledge, Exit Application, Audit Tracking), Electronic signature role (None, Operator, Verifier, Operator and Verifier)
23.6 Operate Window	Open Window, Close Window
23.7 User Manage	Login, Logout, ChangePassword, AddUser, EditUser, MoveUser
23.8 System Exit	The project configuration can be set to three types: No Signature, Operation Signature, Operation and Verification Signature
23.9 Operation Variable	Write Value, Continuous Signature
23.10 Alarm Ack	Single ack, Multiple ack, Ack Alarm, Ack Recovery
23.11 Recipe Manage	Recipe Save, Recipe Write
23.12 Audit Viewer	Query, Filter, Export, Backup, Print
23.13 Electronic Signature Types	No Signature, Operation Signature, Operation and Verification Signature