

Edition 2022-Q2

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MPD300 IP55 drive and motor with special pump functions!





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News

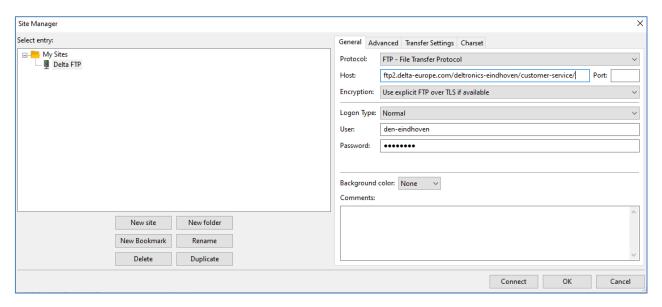
1.1 FTP-Site Link & Update

Our FTP server provides product information that is not available in Delta's Download Center on the global website, e.g. datasheets, technical notes, presentations, software, etc. You can visit our FTP site with below account info.

Host: ftp2.delta-europe.com/deltronics-eindhoven/customer-service/

Username: den-eindhoven Password: BuPd2175

• NOTE Please use common FTP clients such as FileZilla or Total Commander to access the FTP. Accessing with standard web browsers, like Edge, Chrome, Opera, etc. is not possible anymore.





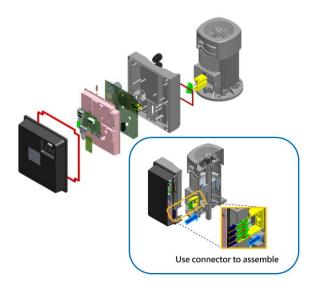
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2 Product update

2.1 NEW - MPD300 - Decentralized drive with high efficiency SynRM motor

The new MPD300 series is officially released in EMEA. The initial stock will be available at the end of August/beginning of September. You can download the catalogue, user manual, drawings, certification and relevant software from our Download Center.

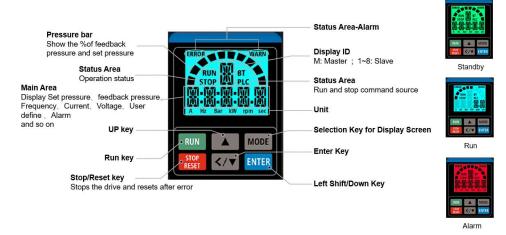
The MPD300 series is composed of the MP300 drive and the MSI synchronous reluctance motor:



Main features:

- Motor-mounted VFD, 400V 0.75kW~7.5kW. Later it will be extended up to 22kW
- 2. IP55 protection class, Fan-free VFD design (On Delta Motor)
- 3. System energy efficiency meets International Energy Efficiency Targets IES2 & Compliant with IEC61800-9-2 standard
- 4. High efficiency IE5 synchronous reluctance motor
- 5. Motor flange installation according to IEC standard B5/V1 and B14/V18
- 6. Pump specific function for water supply system
- 7. 2 independent channels of RS485 communication (HMI and Multi-pump)
- 8. Integrated PLC and real time clock
- 9. Build-in EMI filter (optional)
- 10. Smart APP for pump application (via optional Bluetooth card)

New keypad design:

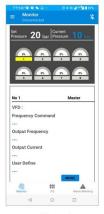




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Mobile application:

The "Delta Drive Tool" app can be found in the Google Play store on your android device







Parameter Setting



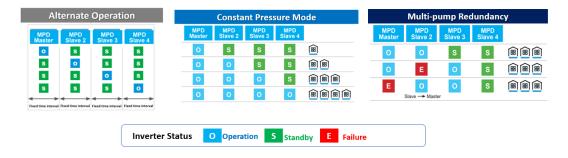
Pump Functions Wizard



Error **Handling Guidance**

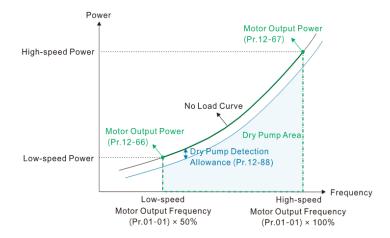
New pump functions:

1. Multi-pump / Multi-Master (redundancy)



2. Dry Run

Detects when the water supply is stopped based on the power consumption. An autotune is required in order to determine the load curve.





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3. Pressure Alarm (High/Low)

Detects when the pressure in the system is above or below a set value and gives out a Fault or Warning message

4. Cleaning Function

Removes foreign objects from the pump blades by changing direction of rotation according to a set cycle.

The cleaning function can be triggered by:

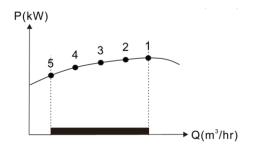
- Output current when there is an abnormal load on the pump
- Digital input triggered by an external controller
- A fixed schedule (day/hour/minute) the calendar function must be enabled and the date must be properly set (a battery is required)

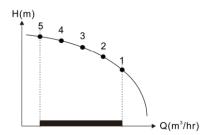
5. Heavy Water Leakage

Detects when there is a sudden drop in the pressure of the water supply system and gives out a Fault or Warning message

6. Flow estimation (Q-H/P-Q)

Drive can estimate the flow without the use of an actual flow meter. This can be done either based on the drive output power (PQ) or based on head (with the help of two pressure sensors):

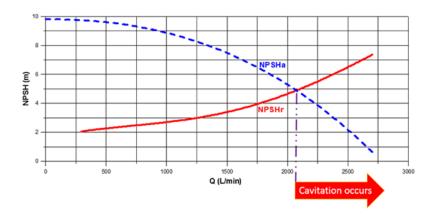




7. Cavitation detection

Detects cavitation based on the inlet pressure value and NPSH and flow curve.

NPSHa: Net Positive Suction Head Available **NPSHr**: Net Positive Suction Head Required





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2.2 NEW - MH300 - High Performance Compact drive - M300 series

The long awaited MH300 series is officially released in EMEA. The initial stock is already available.

You can download the catalogue, user manual, drawings, certification and relevant software from our Download Center.



MH300 is the High Performance variant from of the M300 series (MS – Standard; ME – Economic).



Main features:

- 1. Supports Field Oriented Control (FOCPG)
- 2. Speed control and Torque control (Positioning will also be supported in the future after hardware version 2 is released)
- 3. Can work with either IM and PM motors
- 4. High starting torque and fast response to load impact make it ideal for hoisting applications
- 5. Compact design and side-by-side installation
- 6. Built-in Modbus and CANopen communication
- 7. Support for optional cards: I/O, PG and communication
- 8. Built-in PLC (5k steps)



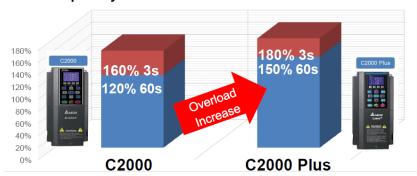


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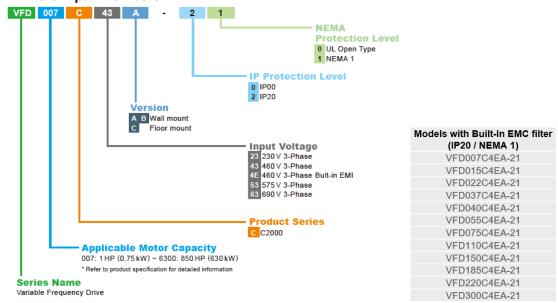
2.3 **UPDATE – C2000 transition to C2000+**

The C2000 is slowly being phased out and replaced with the C2000+. In terms of size and features they are identical. The differences are mentioned below:

1. Improved overload capability:



2. Different part-numbers:



3. Improved power range:



Last buy for the C2000 is in December 2022 after which it will enter EOL



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2.4 NEW - RJ45 to 3 screw terminals (connector) - %RJ45-TB-3PIN

The ME300 has only one RS485 port. This can make it difficult to connect it in a daisy chain. For this reason, we developed the following solution:



It is a simple conversion from RJ45 connector to a 3-screw terminal connector. The text: "SGND", "SG+" and "SG-" is placed on the removable connector.

With the screw terminals you can now daisy chain the drive to the next device.

Part number: %RJ45-TB-3PIN

How does it fit:







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NEW – LD-E Laser displacement sensor

Main features:

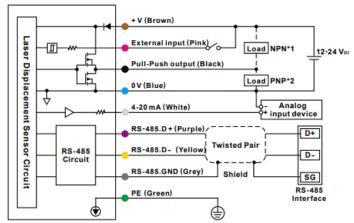
- 1. Designed with 7-segment display for easy set-up.
- 2. Sensing distance: 500± 200mm, 220 ± 100mm,100 ±35mm
- 3. Repeatability 300~800µm (Depending on sensing range)
- 4. Linearity ± 3%
- 5. Compact housing, IP67
- 6. CE certification
- 7. Usable for: Thickness and width measurements, Detection of height, gradient, position, flatness, gap, distance of objects



Electrical specifications:

Model	LD-100E-M22 LD-220E-M22 LD-500E-M22						
Sensing Method	Triangulation						
Detection Distance (mm)	100 ± 35						
Repeatability (µm)	70	300 (in distance rar 500mm) 600 (in distance rar 700mm)					
Spot size, Approx. (µm)	136 x 110	290 x 238	541 x 330				
Interface	Digital IO / A	nalog output / Mod	lbus Communication (RS-485)				
Light Source		Laser Cl	LASS 2				
Input Voltage		12 - 24 Vdc :	± 10%, 1 W				
Analog output		Current Ran	ge: 4-20mA				
Digital Output	Push-Pull output						
Digital Input	Н	igh-level ≥ 2 Vdc, l	_ow level ≤ 0.8 Vdc				
Sample Rate (msec)		1.5 / 3 / 5 (0	default 1.5)				
Indicator	L	aser ON: Blue, DO	: Green, DI: Yellow				
Operating temperature		-10 - 50 d	legree C				
Storage Temperature		-25 - 65 d	legree C				
Ambient Humidity	30 - 85 %						
Protection Degree	IP67						
Ambient Light							
Resistance	3.000 Lux or Less						
Certification	CE						
Cable length		2 me					
Dimensions (HxWxD)		25 x 44 x	24 mm				

Wiring:



*Note 1: In case of NPN connection, please connect the load between black and brown pin (+ V) *Note 2: In case of PNP connection, please connect the load between black and blue pin (0 V)



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2.6 UPDATE - ISE Inductive proximity sensor

Senses magnetic substances for positioning, counting, and presence / absence detection, applicable to all industries.

- · Nickel coated brass / stainless steel
- Presence / absence detection of magnetic substance
- IP67
- CE certification
- Reverse voltage protection (RVP)



The ISE series is compatible with the IS series and will replace it.

Due the world-wide material shortage, the replacement of the M12 and M18 versions will start directly. If customers are normally purchasing the IS series, they will probably get delivered the new ISE series instead if there is no stock on the IS.

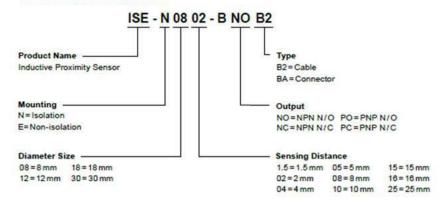
But there is more good news.

The new ISE series will be extended with more models. The complete range will be:

- M8 M12 M18 M30
- We start with the cable versions by the end of this year and beginning of next year the connector versions will also be available.
- The complete series will be available in standard distance version as well in an extended distance.
- Isolated and non-Isolated version.

The M12 and M18 can already be ordered. The rest will be available at the end of this year.

Ordering Information



ISE sensor is already added in the brochure.



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2.7 UPDATE - ASD-A2-E and ECMA hardware changes

In order to overcome the component shortage scenario some strategical action has been taken to help maintain the products supply to our customers. Technically our design department introduced a second supplier for some critical components.

Side effects:

- In A2-E there's no FW backward compatibility.
- For a short time, more than one HW release will be in mass production.
- In ECMA special design attention must be given in application with long encoder cables.

Action plan and consequences:

- A2-E
 - Customers that use the standard FW are not affected because the ASD-A2-E will arrive with proper FW from factory without any functional restriction.
 - Customers that use special FW will have to be in touch with us and we will provide an updated version accordingly the HW.
- ECMA

Customer will have to pay special attention in encoder cable design. It will mainly affect application with long cable (roughly more than 10 meters)

2.7.1 Firmware update (v1.655 sub643) for ASDA-A2 series product

Firmware and hardware release time:

Model	Previous firmware version	Latest firmware version	Time for introducing the latest firmware in Wujiang plant (first batch)
A2-E 220V	v1.654 sub642	v1.655 sub643	W2209
A2-E 400V	v1.654 sub642	v1.655 sub643	W2209

Description:

- 1. Considering raw material shortage problem in the near future, RD team add new second source in A2-E series.
- 2. This modification will not impact any existing product certification.
- 3. The firmware is updated to be fully compatible with the new second source. Check the compatibility according to the factory firmware version of your servo drive.
 - When your servo drive's factory firmware version is v1.655 sub643, you can only flash the firmware version of v1.655 sub643 or later.
 - When your servo drive's factory firmware version is v1.654 sub642 or below, the firmware of v1.655 sub643 or later is not compatible for flashing.
- 4. For special firmware version please contact Delta support window
- 5. The product shipment will be used of both sources because material shortage problem.

Comparison table for firmware flashing:

Servo drive factory firmware	v1.654 sub642	v1.655 sub643
v1.654 sub642 or below	Compatible	Not compatible
v1.655 sub643 or later	Not compatible	Compatible

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2.7.2 ECMA-ECM-E2M series – Notification for substitute materials and supplements

Items	Effective Date	Items	Effective Date
WJ Factory 1	W2134	TW Factory 1	T2127
WJ Factory 2	W2134	TW Factory 2	T2142
WJ Factory 3	W2134	TW Factory 3	T2142

Due to the shortage of electronic components, the encoder adds new substitute materials to avoid the shortage of materials and facilitate stable shipments. A possible side-effect of this is AL011 and AL033 faults.

Solution or critical check:

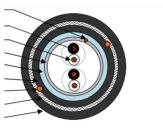
- (a) Check if the encoder 5V power supply is lower than 4.3V.
- (b) Check whether the wire specification meets the following requirement and do not use the wire with the length exceeding the specification or without the isolation shielding.
- (c) Confirm whether the encoder signal cable is normal, and separate the encoder signal cable from the power supply or high current cable to avoid interference.
- (d) Following data reveals the max resistance of cable for different drives.

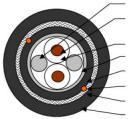
A2 series: max resistance is 1 ohm.

A3 series: max resistance is 2 ohm.

Encoder Cable Specification: the following pictures indicate meaning of 2C and 2P.

Cable length	Size	Number	Certification
L = 3 ~ 20 m (9.84 ft ~ 65.6 ft)	0.324 mm²-2C(AWG22-2C) +5 V and grounding 0.205 mm²-2P(AWG24-2P) encoder cable	2C+2P	UL2464
L = 21 ~ 50 m (68.9 ft ~ 164 ft)	1.31 mm ² -2C(AWG16-2C) +5 V and grounding · 0.128 mm ² -2P(AWG26-2P) encoder cable	2C+2P	UL20276





AXL3: 0.9mm×2P

SGT1: 2.5mm×2C



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2.8 NEW – 480 W Model Ultra Slim DIN Rail Power Supply LYTE II Series



Delta expands the LYTE II Series ultra slim DIN Rail power supply by adding a new 480 W model. The new 480 W model is 56 mm in width and 35% slimmer than the previous generation to save cabinet installation space. It offers single outputs of 24 V (DRL-24V480W1EN) and 48 V (DRL-48V480W1EN) with an efficiency up to 93.5%. The convection-cooled LYTE II series provides full power across a wide operating temperate range of -30°C to +50°C and de-rating up to +70°C at 230 Vac. It can operate in constant current mode, making it suitable for reactive load such as robotic arms, CNC machines, control cabinets, and charging applications.

The LYTE II Series is certified with safety standards IEC/EN/UL 62368-1 and IEC/EN/UL 61010-1/-2-201, and its electromagnetic radiated and conducted emission is compliant to heavy industrial EN 61000-6-4 Class B Emission standard and EN 61000-6-2 Immunity standard. As to environmental protection, the product complies with RoHS Directive to fulfill the requirement.

Highlights & Features

- Universal AC input voltage range
- Built-in constant current circuit for reactive loads
- High power density
- Operating temperature from -30°C to +70°C with -40°C cold start
- Slim design
- Reduced no-load power consumption
- Compliant with SEMI F47 @ 200 Vac



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2.10 NEW - DIN Rail Power Supply Force-GT Series



Delta launches new DIN Rail power supply Force-GT Series with single-phase and three-phase models. The Series features wide power range from 120 W to 960 W, high power efficiency of up to 95%, and an ultra-slim design. Two single-phase 480 W models of the Series have just been certified with 80 PLUS Platinum for 115 V Industrial, outcompeting other DIN rail power supplies.

The Force-GT Series provides 120 W to 960 W power and voltage output from 12 V to 48 V. The Series features power conversion efficiency up to 95% and derating at > 60°C by 2.5%/°C (1 PH) and at > 55°C by 2.5%/°C (3 PH). It is environmentally friendly and significantly reduces unnecessary energy consumption and extra operating costs. Featuring -30°C to 70°C wide range operating temperature, -40°C cold start, up to 60°C full load temperature, and protective coatings that prevent dust and chemical pollutants, the Series can be applied in harsh industrial environments. With the aforementioned advantages, Force-GT Series is reliable and meets the demands for advanced, high-stability-demanded machines such as semi-conductor equipment, advanced manufacturing equipment, and industrial robots.

Compared to the previous generation, the Force-GT Series offers reduced volume by 30% - 50%, thus, allowing for more space in machines or cabinets. In addition, its built-in DC OK relay allows for connection to sensors in smart solution applications. The Series is compliant with multiple international safety certifications and meets heavy industry and semiconductor standards to offer highly efficient and stable power supplies to customers worldwide.

Highlights & Features

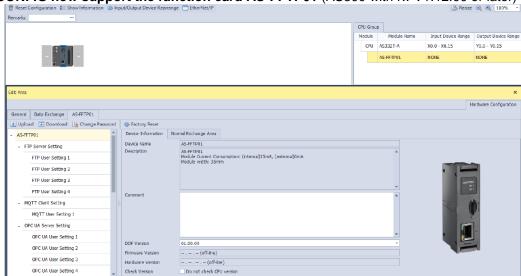
- Universal AC input voltage range
- Built-in constant current circuit for charging applications
- Wide operating temperature -30°C to 70°C and cold start at -40°C
- Full load operating temperature up to 60°C
- Ultra-slim design
- Long life electrolytic capacitor
- Reduced no-load power consumption
- Built-in DC OK relay and LED indicator
- Conformal coating on PCBAs to protect against common dust and pollutants



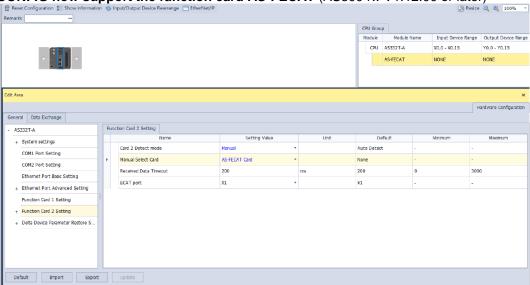
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2.11 UPDATE - ISPSoft version 3.16 is released

1. HWCONFIG now support the function card AS-FFTP01 (AS300 with fw V1.12.00 or later)

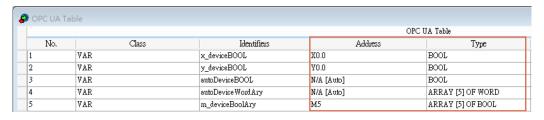


2. HWCONFIG now support the function card AS-FECAT (AS300 fw V1.12.00 or later)



3. Optimized OPC UA variable Table.

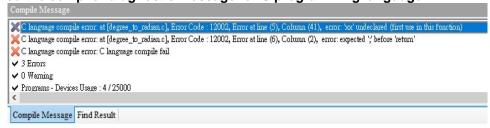
- (1) Now the new data type boolean (BOOL) is supported.
- (2) Now the use of devices X and Y are supported in the addresses of the variables.
- (3) Now the addresses of the variables can be designated to the devices automatically.
- (4) Now when the address of the variable is a boolean array, the number of the device M can use numbers that are NOT multiples of sixteen.
- (5) Now when the declared variable is a boolean array, the length of declared variable can use numbers that are NOT multiples of sixteen.





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4. Optimized the compiler diagnostic message for C programming language



5. Newly added instructions

Instruction	Model	FM Version	Model	FW Version	Model	FW Version
ATMR	AS300	V1.12.00	AS200	V1.12.00	DVP ES3	V1.06.00
ATMRH	AS300	V1.12.00	AS200	V1.12.00	DVP ES3	V1.06.00
ATMRM	AS300	V1.12.00	AS200	V1.12.00	DVP ES3	V1.06.00
MLPF	AS300	V1.12.00	AS200	V1.12.00		
MQTT_Connect	AS300	V1.12.00				
MQTT_Publish	AS300	V1.12.00				
MQTT_Subscribe	AS300	V1.12.00				
Record_Trigger	AS300	V1.12.00				
INITEC	AS300	V1.12.00				
ECATRW	AS300	V1.12.00				
мотѕт	AS300	V1.12.00				
ECATST	AS300	V1.12.00				
DPUCONF	DVP ES2	V4.02	DVP ES2-C	V3.80		
PUSTAT	DVP ES2	V4.02	DVP ES2-C	V3.80		
DPUPLS	DVP ES2	V4.02	DVP ES2-C	V3.80		
DPUDRI	DVP ES2	V4.02	DVP ES2-C	V3.80		
DPUDRA	DVP ES2	V4.02	DVP ES2-C	V3.80		
DPUZRN	DVP ES2	V4.02	DVP ES2-C	V3.80		
DPUJOG	DVP ES2	V4.02	DVP ES2-C	V3.80		
DPUMPG	DVP ES2	V4.02	DVP ES2-C	V3.80		
DPUCNT	DVP ES2	V4.02	DVP ES2-C	V3.80		
PUX	DVP ES2	V4.02	DVP ES2-C	V3.80		
PUXP	DVP ES2	V4.02	DVP ES2-C	V3.80		
DPULS	DVP ES2	V4.02	DVP ES2-C	V3.80		
DPULSP	DVP ES2	V4.02	DVP ES2-C	V3.80		

6. The following issues are fixed and functions are modified:

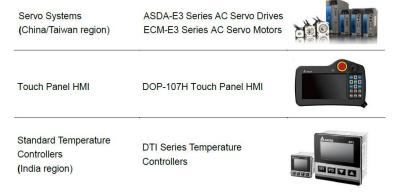
- (1) Upgraded the data length of input and output for EtherNet/IP general device from 500 to 505 byte.
- (2) Updated the display rule of Connection Manager in EtherNet/IP data exchange editing page: Connections not supported will not be presented from the drop-down list of Connection Manager.
- (3) Fixed an issue that the X registers should not be shown in the drop-down list of Adapter Start Address for AS Series PLC CPU.
- (4) Added a new function: The ranges of register addresses in Scanner Start Address / EIP Tag column will be checked.
- (5) DUT.wordVar.1 is supported. The data type, bit, can be used in Word typed variable under Data Unit Type (DUT).
- (6) Optimized online mode for AS Series PLC CPU; multiple POUs can be edited simultaneously.
- (7) After updating in online editing is complete and leaving it for a period of time, a message will show up. ("Program is modified and you have not updated it on-line. Recover the program to its status before on-line editing?") Since the update is complete, the message shown to remind users to update the program is not necessary. Removed the message.
- (8) After using the replace function, if there is any change, a window will be prompted to remind users to compile the program before switching to online mode.
- (9) Fixed an issue that if the order of the connected modules is changed, after the project is saved and closed, the variable table of HWCONFIG and ISPSoft cannot be synchronized correctly.



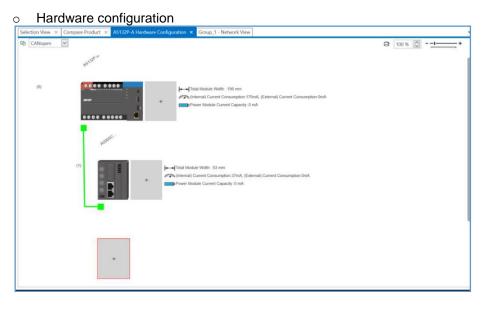
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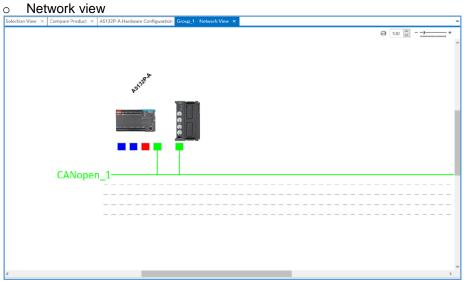
2.12 UPDATE - DIASelector version 1.2.0 is released

The following are the new devices being supported:



 Support for AS100 Series in Hardware Configuration and Network Support AS100 to make Bill of Material (BOM) out of the configuration

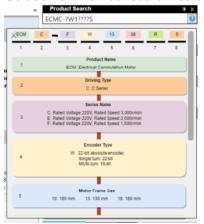






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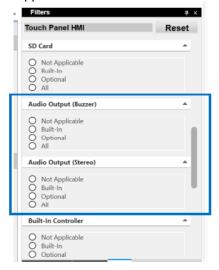
- Update product properties to support Guided Part Number Search and Filter features
 - Update ECMC Series AC Servo Motor Part Number pattern and help image for Guided Part Number search feature.



 Update HMC Series Touch Panel Part Number pattern and help image for Guided Part Number search feature.



 Update Touch Panel HMI property-set with Audio Output (Stereo) to extend filter support in DOP-100 HMI.



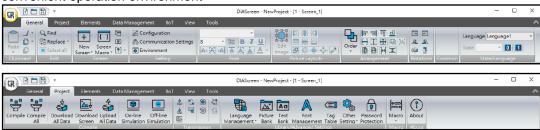
You can use the following link to download DIAInstaller in DIAStudio V1.1.3 and then install DIASelector V1.2.0: https://diastudio.deltaww.com/home/downloads?sec=download



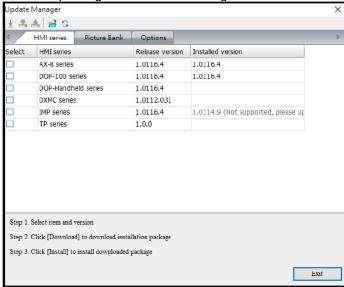
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2.13 UPDATE - DIAScreen version 1.2.0 is released

1. Introduce brand new Ribbon user interface for better element visual distinctiveness and more convenient operation environment



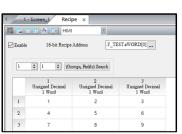
2. Introduce Update Manager feature, allowing user to update HMI series firmware or picture bank through individual installation package without re-installing the entire software.

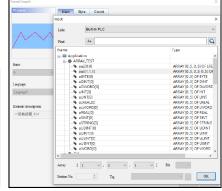


3. Optimize disk space requirements for software installation, resolving disk space shortage and decrease download time

DIAScreen installation procedure	V1.2.0	V1.1.3
Required space to download installation package	1.1 GBytes	1.8 GBytes
Required space during installation	7 GBytes	13 GBytes
Required space after installation	4 GBytes	6.96 GBytes

4. Expend the scope of use for Build-in PLC Tag array (such as X-Y chart, animated graph and recipe). This enhancement allows user to set up consecutive addresses access through array, decreasing the time and complexibility to set up element addresses.







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2.14 UPDATE – DIAView version 3.7.0 is released

The functions which are modified and the functions which are added are described below:

- 1. Added the function of full-screen window editing.
- 2. Fixed an issue that if the association is not created during programming, users cannot use the FindAnimation script to create associations with animations during operation.
- 3. Now the animation function can be used to connect to the extension property.
- 4. Added the functions of script and color-fill property in the text control.
- 5. Added the function of brush animation in the text control.
- 6. The three language versions of the gallery ware merged into one language version, and the installation package size is also reduced.
- 7. Added 300 new graphics in the image gallery.
- 8. Added script functions for font colors, backgrounds and value settings in reports, and checks for duplicates are supported.
- 9. Added the function of hiding and un-hiding the specified column in reports: SetColumnHidden.
- 10. Added the function of hiding and un-hiding the specified row in reports: SetRowHidden.
- 11. Added the function of setting background color for the current row or column in reports: FillSelectedCellRowColumnColor.
- 12. Added the script function for setting X-axis time range in the real-time chart: SetPageRange.
- 13. Optimized the refresh performance for the timer in the real-time chart.
- 14. Added a new ladder diagram in the custom chart.
- 15. Added new functions, including RTSP video recording, online playing and playing-back.
- 16. Added the function of variable filtering query.
- 17. Added alarm notifications via various new communication apps, including enterprise WeChat, IFTTT (Line, WhatsApp and Telegram).
- 18. Optimized the alarm performance and improved the refresh speed for the alarm information.
- 19. Fixed an issue that the alarm voice message cannot not be played.
- 20. Fixed an issue that the system may crash when there are too many temporary files and the system is not connected to the database.
- 21. Added the 3rd Party Access WebAPI service.
- 22. Added XY chart control in the web window.
- 23. Added custom chart control and column chart control in the web window; basic functions and script functions are included.
- 24. Removed OPC DA Server function from DIAView.

Download the software at Delta | Download Center (deltaww.com)



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2.15 **NEW** – PPC and IPC – New models

DIAVH IPC and PPC is a low power consumption, high performance/reliable and fan-less embedded industrial computer.

2.15.1 DIAVH series releases new models - Memory upgrade to 8GB model



Product specification - Industrial Panel PC PPC

(10 inch / 12 inch / 15 inch / 17 inch / 19 inch / 21 inch) Intel® Celeron J1900

Model		DIAVH-PPC10J Series	DIAVH-PPC12J Series	DIAVH-PPC15J Series	DIAVH-PPC17J Series	DIAVH-PPC19J Series	DIAVH-PPC21J Series			
Processor	CPU	Intel® Celeron J1900								
System	Core Number	4								
	Socket			1× S0	-DIMM					
	Technology	DDR3L								
Memory	Standard Capacity			4/8	GB)					
	Max Capacity			80	3B					
	Interface			1× Full-si	ize mSata					
Storage	Standard Capacity			128	GB					
	Front Bezel			Aluminum al	loy with IP65					
	Touch Panel			5-wire / resistive	e, USB interface					
	Size	10 inch	12 inch	15 inch	17 inch	19 inch	21 inch			
Panel	Resolution	1024 × 768	1024 × 768	1024 × 768	1280 × 1024	1440 × 900	1920 × 1080			
	Brightness	350 cd/m ²	450 cd/m ²	300 cd/m ²	250 cd/m ²	250 cd/m ²	250 cd/m ²			
	Contrast	800 : 1	700 : 1	1500 : 1	1000 : 1	1000 : 1	1000 : 1			
	Viewing angle (H/V)	170°/170°	160°/160°	140°/140°	150°/140°	150°/140°	170°/160°			
	COM	3× RS-232, 1× RS-485								
	GPIO		4-bit Out nnector)	-	-	-	-			
System I/O	USB	3× USB2.0, 1× USB3.0								
	Ethernet	2× 10/100/1000 Mbps Ethernet								
	Display	1× HDMI / 1× VGA								
	Audio	1× Audio input / output								
Expansion	Mini-PCle		1× F	Full-size mini PCI	e for wireless mo	dule				
	Anti-vibration	1Grms @ 19~200 Hz								
	Anti-shock	10g acceleration, 11ms duration								
	PC Operating		-10°C~50°C							
Environment	Temperature Storage				ir flow					
	Temperature			-20°C	~60°C					
	Relative Humidity			10~95% (nor	n-condensing)					
Mechanical	Dimensions (mm)	258(W) 198(H) 57.5(D)	317(W) 246(H) 65.7(D)	380(W) 300(H) 59(D)	400(W) 320(H) 59(D)	475(W) 308(H) 57(D)	525 (W) 316 (H) 57 (D)			
	Weight	2.8/4.0kg	4.3/5.7kg	5.2/6.8kg	6.1/8.0kg	7.3/8.3kg	7.5/8.5kg			
Pawer	Input Voltage		Input Voltage: 1	With powe 100~240 Vac; Out	er adapter: tput Voltage / Cu	rrent: 12Voc/5A				
Consumption	Standby mode	10W	15W	11 W	11 W	13W	16W			
Certifi	cations		CE, FCC CI	ass A, BSMI		CE, FCC	Class A			



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Product specification - Industrial Panel PC PPC

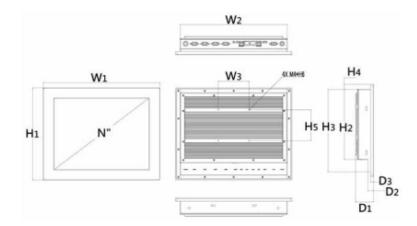
(15 inch / 17 inch / 19 inch / 21 inch) Intel® Core i3 / i5 Series

Mo	odel	DIAVH-PPC15x Series	DIAVH-PPC17x Series	DIAVH-PPC19x Series	DIAVH-PPC21x Series						
Processor	CPU		6th Gen Inte	l® Core i3/i5							
System	Core Number	2									
	Socket		1× SO-DIMM								
	Technology		DDR4								
Memory	Standard Capacity		4/8GB								
	Max Capacity		32	GB							
	Interface		1× Full-si	ize mSata							
Storage	Standard Capacity		256/5	12GB							
	Front Bezel		Aluminum al	loy with IP65							
	Touch Panel		5-wire / resistive	e, USB interface							
	Size	15 inch	17 inch	19 inch	21 inch						
Panel	Resolution	1024 × 768	1280 × 1024	1440 × 900	1920 × 1080						
	Brightness	300 cd/m ²	250 cd/m ²	250 cd/m ²	250 cd/m ²						
	Contrast	1500 : 1	1000 : 1	1000 : 1	1000 : 1						
	Viewing angle (H/V)	140°/140°	150°/140°	150°/140°	170°/160°						
	COM	3× RS-232, 1× RS-485									
	USB	4x USB3.0									
System I/O	Ethernet	2× 10/100/1000 Mbps Ethernet									
	Display	1× HDMI / 1× VGA									
	Audio		1× Audio in	put / output							
Expansion	Mini-PCle		1× Full-size mini PCI	e for wireless module							
	Anti-vibration		1Grms @	19∼200 Hz							
	Anti-shock	10g acceleration, 11ms duration									
invironment	PC Operating Temperature	-10°C∼50°C with air flow									
	Storage Temperature	-20℃~60℃									
	Relative Humidity		10~95% (nor	n-condensing)							
Mechanical	Dimensions (mm)	380(W) 300(H) 59(D)	400(W) 320(H) 59(D)	475(W) 308(H) 57(D)	525(W) 316(H) 57(D)						
	Weight	5.2/6.8kg	6.1/8.0kg	7.3/8.8kg	7.5/8.3kg						
Power	Input Voltage	Input v		er adapter: tput voltage / current: 12	Voc/5A						
onsumption	Standby mode	10W	16W	20 W	20W						
Certifi	ications	CE, FCC Class A, BSMI	CE, FCC Class A	CE, FCC Class A, BSMI	CE, FCC Class A						



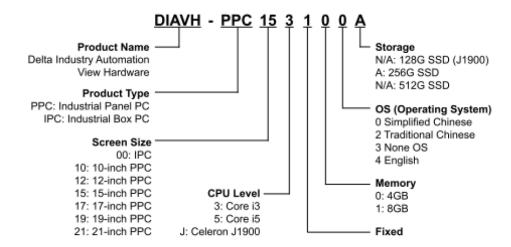
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Dimensions:



Model	inch	h W (mm)			D (mm)			H (mm)				
Model	N"	W1	W2	W3	D1	D2	D3	Ht	H ₂	Нз	H4	Hs.
DIAVH-PPC10 Series	10"	258	239.8	100	57.5	-	10	198	148.4		10.5	100
DIAVH-PPC12 Series	12"	317	306	100	65.7	13	6	246	190	235	5.5	100
DIAVH-PPC15 Series	15"	380	348.8	100	59	19.2	10	300	228.4	268.4	15.8	100
DIAVH-PPC17 Series	17*	400	365.4	100	59	19.2	10	320	245	300.4	9.8	100
DIAVH-PPC19 Series	19"	475	440.4	100	57	21.2	10	308	245	288.4	9.8	100
DIAVH-PPC21 Series	21"	525	499.4	100	57	19.5	9.5	316	245	296	10	100

Part number:





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2.15.2 IPC E200 releases new model - Memory upgrade to 4GB model



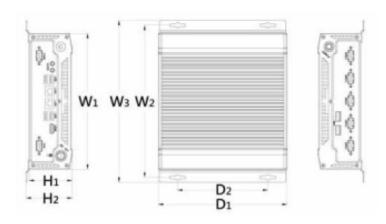
Product specification - IPC

Model		Embedded Type	Standard Type	Advanced Type	Professional Type		
Mo	odel	IPC-E200 Series	DIAVH-IPC00J Series	DIAVH-IPC003/5 Series	IPC-A300 Series		
Processor	CPU	Intel [®] Celeron N3350	Intel [®] Celeron J1900	6 th Gen Intel [®] Core i3/i5	6 th Gen Intel [®] Core i3/i5/i7		
System	Core Number	2	4	2	2 (i3) / 4 (i5/i7)		
	Socket		1× SO-DIMM		2× SO-DIMM		
	Technology	DDR3L	DDR3L	DDR4	DDR4		
Memory	Standard Capacity	2/ <mark>4GB</mark>	4/ <mark>8GB</mark>	4/ <mark>8GB</mark>	8GB		
	Max Capacity	8GB	8GB	32GB	32GB		
	Interface	1× Half-size mSata	1× Full-size mSata	1× Full-size mSata	2× 2.5" Sata III		
Storage	Standard Capacity	64GB	128GB	256/512GB	256/512GB		
	COM	1× RS-232/422/485 Selected by BIOS	5× RS-232 1× RS-485	4× RS-232 2× RS-485	4× RS-232/422/485 Selected by BIOS		
System I/O	DIO	8-bit DIO Selected by BIOS, DB9 Connector	-	-	-		
	USB	2× USB2.0	5× USB2.0 2× USB2.0 1× USB3.0 4× USB3.0		4× USB3.0		
	Ethernet						
	Display	1× VGA		1× HDMI / 1× VGA			
	Audio	-	 1× Audio input / output 				
	Mini-PCle						
Expansion	Riser Card	-	-	-	2× PCI or 1× PCI+1× PCIe x16		
	Anti-vibration	2Grms @ 5~500 Hz	1Grms @ 19~200 Hz		2Gms @ 5~500 Hz		
	Anti-shock	-		n, 11ms duration	-		
Environment	PC Operating Temperature	-20°C ~ 70°C with air flow		~60°C air flow	-10°C∼60°C with air flow		
	Relative Humidity	-40°C~85°C	-40°C	~70°C	-20°C~80°C		
	Relative Humidity	10~90% (non-condensing)		95% ndensing)	10~90% (non-condensing)		
	Dimensions W x D x H	31 x 100 x 125mm	211.5x2	00×67mm	147.5 x 230 x 147.5mm		
Mechanical	Weight	0.3/0.5kg	2.8/3.5 kg		4.4/5.4 kg		
	Installation	DIN-rail		Wall Mount / Desktop			
Power Consumption	Input Voltage	12~24 Voc Terminal block OVP(±20%) & reverse current protection	With pow Input voltage Output voltage /	With power adapter: Input voltage: 100~240 V.c Output voltage / current: 24 Voc/5A			
	Standby mode	17W	7W	10 W	28W		
Certifi	cations	CE, FCC Class A	CE, FCC C	lass A, BSMI	CE, FCC Class A		

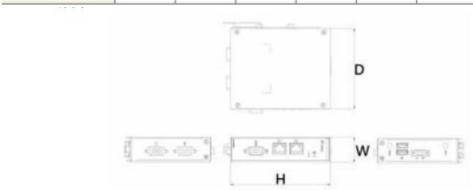


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Dimensions:

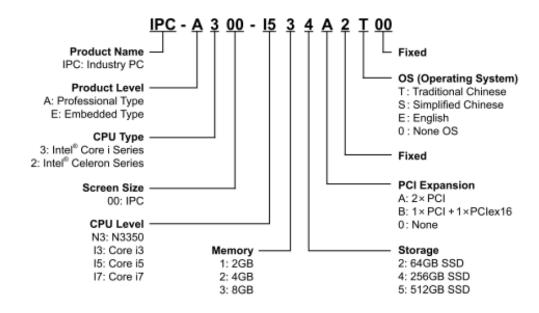


Model	W (mm)			D (mm)		H (mm)	
Model	W1	W2	W3	D1	D2	H1	H2
DIAVH-IPC00 Series	211.5	236.9	251.9	200	140	67	71.6



Model	W (mm)	D (mm)	H (mm)
IPC-E200 Series	31	100	125

Part number:





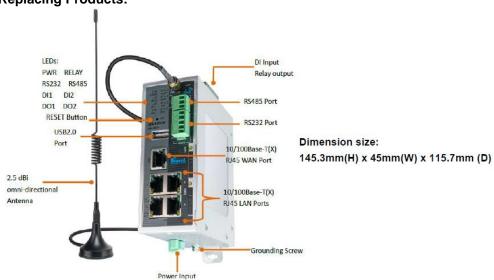
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2.16 PHASE OUT - DX-2100RW-WW and DX-3001H9

Phase out Product List

	Phase-	out Product	Replac	ing Product	Loot Buy Data	Phase-out Date	
Type	Product Name	Description	Product Name	Description		(YYYY.MM.DD)	
Router	DX-2100RW-WW	3G DIACloud router	DX-3021L9	4G/WAN DIACloud router	N/A	2022.4.30	
Router	DX-3001H9	3G/WAN DIACloud router	DX-3021L9	4G/WAN DIACloud router	N/A	2022.4.30	

Size of Replacing Products:



Ordering information:

• '	defing information.									
									4G	Released
	Product		Port Combination			Interface				Region
										(Legal import)*
	Model Name	Operating Temperature	10/100Ba se-T(X)	RS-232	RS-485	Power Input	Digital Input	Relay Output	Universal Bands	Taiwan(ROC), USA, EU,
	DX-3021L9	-20°C to 70°C	5	1	1	1	2	2		China(PRC), India

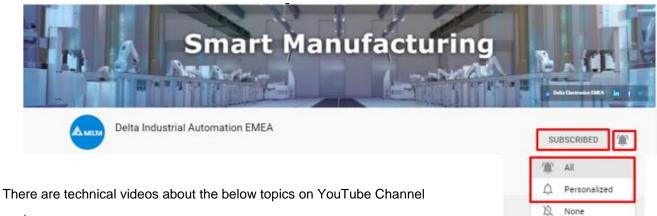
Phase out Date: 2022-04-30



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Application

NEW – More technical videos are available on YouTube Channel



https://www.youtube.com/c/DeltaIndustrialAutomationEMEA

Subscribe and enable notification in order to get notifications on all our new videos.

- 1. Delta Crane and Hoist Solution Real time Anti Sway Control
- 2. AX-3 quick setup for axis
- 3. Delta's high-efficient Industrial Automation Solutions Live at Hannover Messe 2022



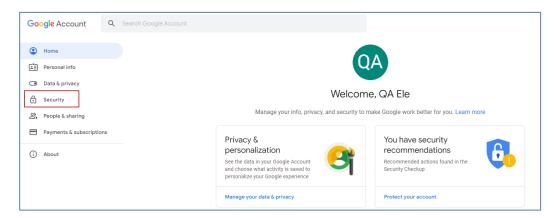
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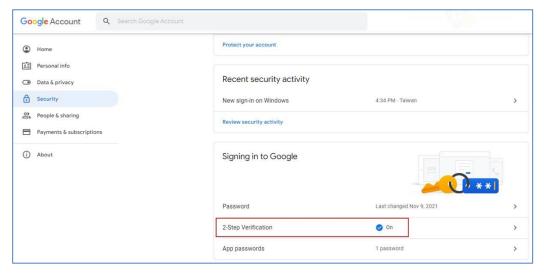
4 FAQ

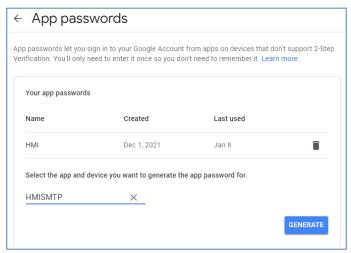
4.1 HMI Series

DOP100

Why is the DOP100 SMTP server no longer sending emails to my Gmail account?
A Gmail no longer support Less Secure Apps option. In order to make DOP100 keep sending mails we need to enable the <u>2-step verification</u> option on the Gmail account. This can be done as follows:









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