

Digitized Automation for a Changing World

Delta OPEN CNC Controller NC E Series



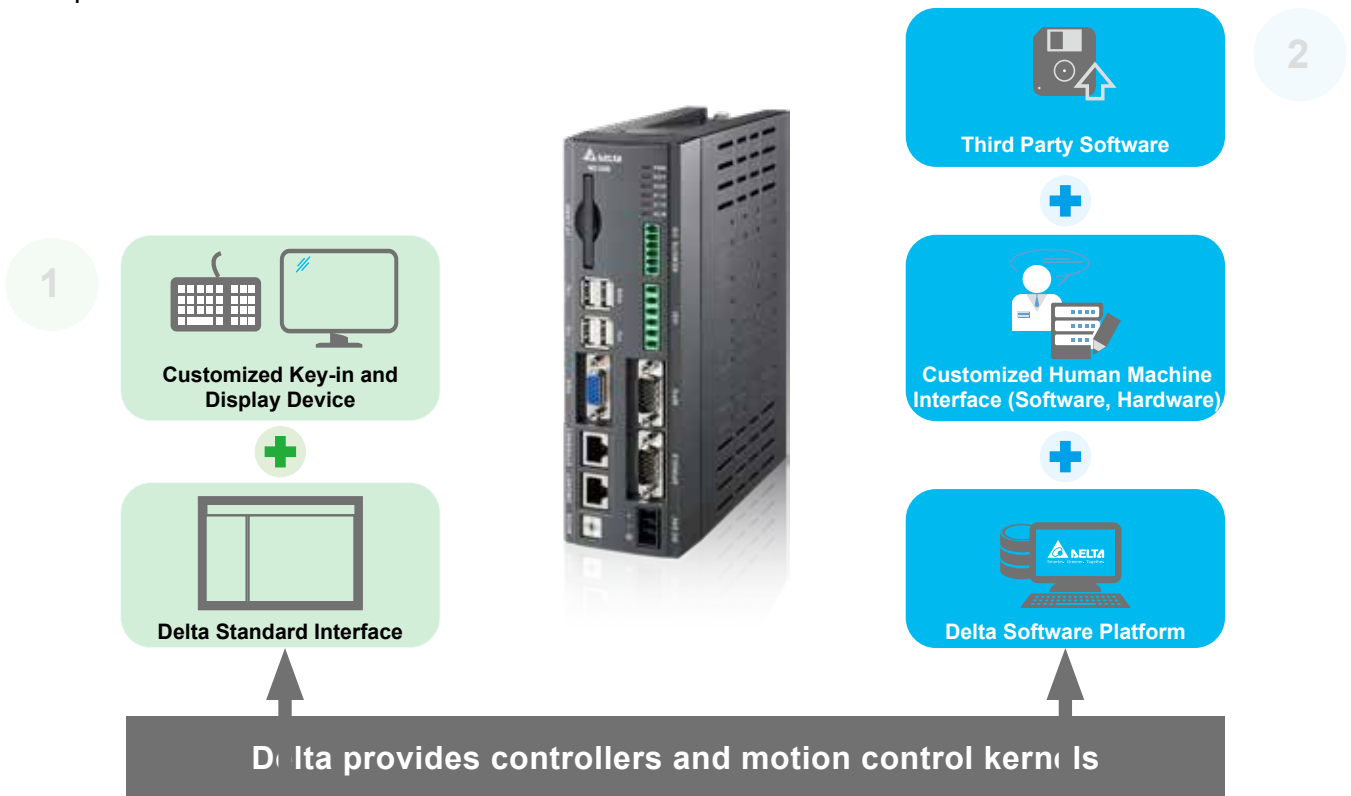
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 **DELTA**
Smarter. Greener. Together.

Features

Open-structured CNC System

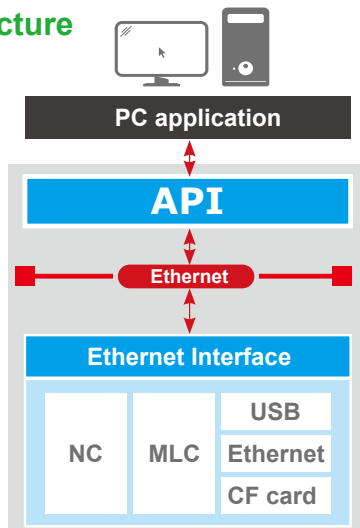
- Offers open structure for hardware and software, which allows customized integration, excellent flexibility and openness for a wide range of machine applications and industries
- Allows customers to choose different product combinations based on product features and market requirements with Delta's motion kernels and hardware structure



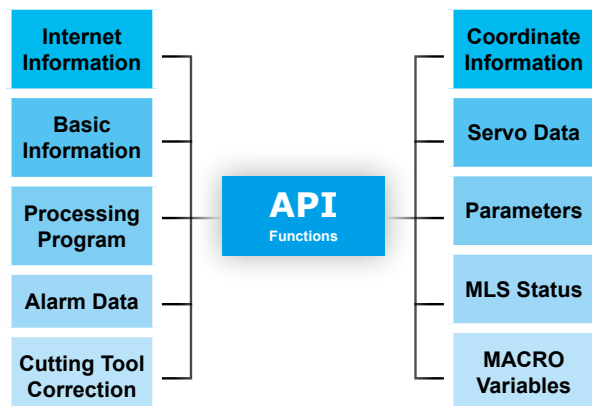
Application Programming Interface (API)

Supports the Application Programming Interface (API) that helps CNC machine makers, who might develop personal application software or combine with other value-added software, to customize the controller and integrate the information of the open CNC controller into their personal platform via Ethernet.

API Structure



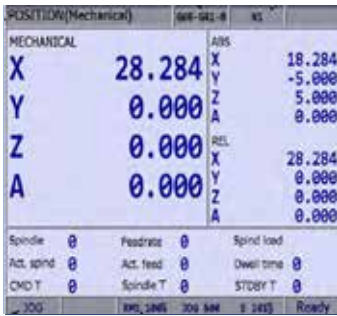
API Functions



Flexible Interface

Built-in interface for operation display and functions allows customers to modify Delta's customized interface or develop self-defined interface to make machining operation more flexible and simpler

Standard Interface



Customized Interface



- Pushbutton Setup
- Layout Color
- Font Size
- Content Arrangement



Specifications

| Item | Specification |
|---------------------------------------|--|
| Maximum Number of Connected Computers | Permits 5 computers (the maximum) for simultaneous connections |
| Maximum Number of Socket Connections | Permits maximum of 10 simultaneous connections |
| DHCP | Available |
| VGA Resolution | Supports display resolution 800x600 (B series: 1,024 x 768) |
| USB Support Device | 1 USB Disk 1 Mouse (only for software panel), supports touch screen 1 Keypad |
| Authority Management | Assigns authority for API reading, coding or both to different level of user groups (each connection has a separate authority) |

Model Name



B Series:

- Adds 2 sets of I/O ports and 2nd OP port
- Supports Delta 2nd OP or 3rd party 2nd OP
- Adds 2 sets of DA and Pulse Output for twin spindle application

| Model Name | Controlled Axes | Simultaneous Controlled Axes | Linear Interpolation | Circle Interpolation |
|------------|-----------------|------------------------------|----------------------|----------------------|
| NC30E | 4 Axes | 4 | 4 | 2 |
| NC30E B | 4 Axes | 4 | 4 | 2 |
| NC30E H | 6 Axes | 5 | 5 | 2 |
| NC30E B H | 6 Axes | 5 | 5 | 2 |

System Configuration

Description

- OPEN CNC's customized platform structure offers a user-friendly interface
- Provides a smart platform and library for customers to self-define programs and conduct software development
- Reduces additional hardware cost for customers to focus more on software upgrades and better integrated operation performance

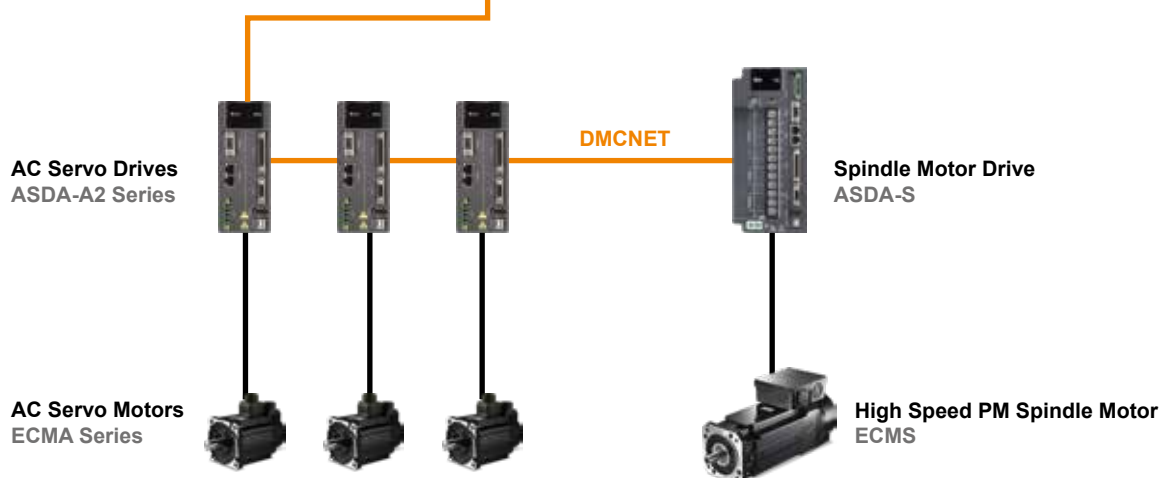
Solution 1: Standard

VGA output for external display with Delta's standard interface


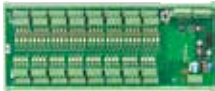








Solution 2: Function-Oriented

Customizable solution with different panel sizes for various applications



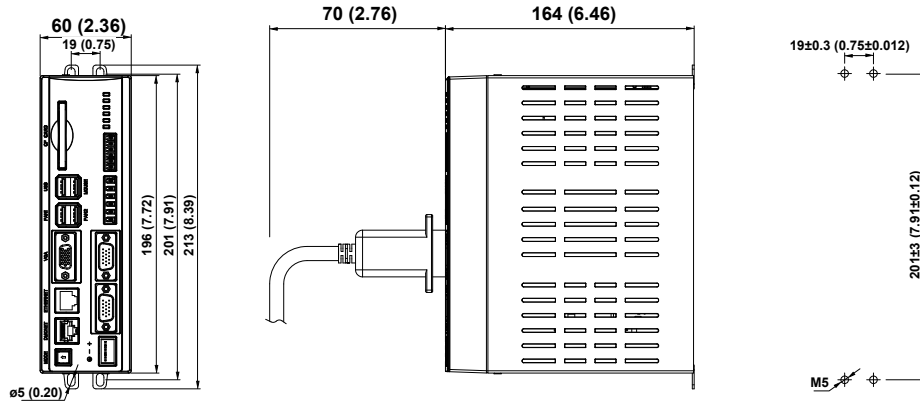
Optional Accessories

| High Speed Serial I/O | | | Other |
|---|--|---|--|
| Serial Cable | Photocoupler Type | Relay Type | HOP |
|  <ul style="list-style-type: none"> Provides 1.5 / 3.0 / 5.0 / 10 m Part No. 1.5m NC-CAB-EIO015 3.0m NC-CAB-EIO030 5.0m NC-CAB-EIO050 10m NC-CAB-EIO100X |  <ul style="list-style-type: none"> Supports 32 Inputs/32 Outputs Part No. NC-EIO-T3232 Size: 286x121.78x 51.01 mm (Length x Width x Total Height) |  <ul style="list-style-type: none"> Supports 32 Inputs/ 16 Outputs Part No. NC-EIO-R3216 Size: 286x121.7x 54.73 mm (Length x Width x Total Height) |  <ul style="list-style-type: none"> Part No. NC-HOP-07E-05E (5M cable, Eng. Language) NC-HOP-07E-10E (10M cable, Eng. Language) Size: 257.4x170.3x71.8 mm (Length x Width x Total Height) |

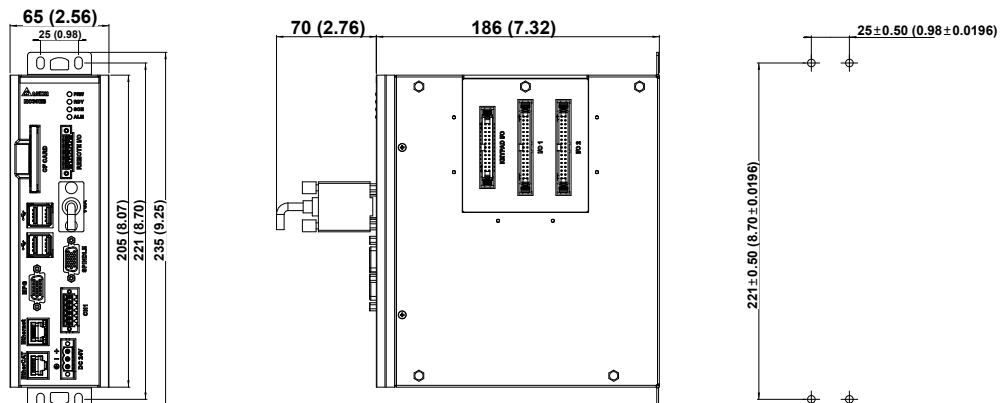
| Cables and Terminal Blocks | | | Other |
|--|---|--|--|
| 6 axis Pulse-type Servo Motor Control Card | AD Terminal Block | DA Terminal Block | Manual Pulse Generator (MPG) |
|  <ul style="list-style-type: none"> Provides 6 Sets of Pulse Signal Output Part No.: NC-EIO-PMC06 Size: 217 x 121.78 x 41.9 mm (Length x Width x Total Height) |  <ul style="list-style-type: none"> Provides Analog Input Type (4 channel ADC) Part No.: NC-EIO-ADC04 Size: 146.25 x 86.78 x 51.05 mm (Length x Width x Total Height) |  <ul style="list-style-type: none"> Provides Analog Input Type (4 channel DAC) Part No.: NC-EIO-DAC04 Size: 146.25 x 86.78 x 51.05 mm (Length x Width x Total Height) |  <ul style="list-style-type: none"> Provides Manual Pulse Generator (MPG) Part No.: NC-MPG-105HS-FL Size: 184 x 73 x 71 mm (Length x Width x Total Height) |

Panel Cutout (Unit: mm)

NC30E



NC30B





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Industrial Automation Headquarters

Taiwan: Delta Electronics, Inc.

Taoyuan Technology Center
No.18, Xinglong Rd., Taoyuan District,
Taoyuan City 33068, Taiwan
TEL: +886-3-362-6301 / FAX: +886-3-371-6301

Asia

China: Delta Electronics (Shanghai) Co., Ltd.

No.182 Minyu Rd., Pudong Shanghai, P.R.C.
Post code : 201209
TEL: +86-21-6872-3988 / FAX: +86-21-6872-3996
Customer Service: 400-820-9595

Japan: Delta Electronics (Japan), Inc.

Industrial Automation Sales Department
2-1-14 Shibadaimon, Minato-ku
Tokyo, Japan 105-0012
TEL: +81-3-5733-1155 / FAX: +81-3-5733-1255

Korea: Delta Electronics (Korea), Inc.

1511, 219, Gasan Digital 1-Ro., Geumcheon-gu,
Seoul, 08501 South Korea
TEL: +82-2-515-5305 / FAX: +82-2-515-5302

Singapore: Delta Energy Systems (Singapore) Pte Ltd.

4 Kaki Bukit Avenue 1, #05-04, Singapore 417939
TEL: +65-6747-5155 / FAX: +65-6744-9228

India: Delta Electronics (India) Pvt. Ltd.

Plot No.43, Sector 35, HSIIDC Gurgaon,
PIN 122001, Haryana, India
TEL: +91-124-4874900 / FAX: +91-124-4874945

Thailand: Delta Electronics (Thailand) PCL.

909 Soi 9, Moo 4, Bangpoo Industrial Estate (E.P.Z),
Pattana 1 Rd., T.Phraksa, A.Muang,
Samutprakarn 10280, Thailand
TEL: +66-2709-2800 / FAX: +66-2709-2827

Australia: Delta Electronics (Australia) Pty Ltd.

Unit 20-21/45 Normanby Rd., Notting Hill Vic 3168, Australia
TEL: +61-3-9543-3720

Americas

USA: Delta Electronics (Americas) Ltd.

5101 Davis Drive, Research Triangle Park, NC 27709, U.S.A.
TEL: +1-919-767-3813 / FAX: +1-919-767-3969

Brazil: Delta Electronics Brazil

Rua Itapeva, 26 - 3º, andar Edifício Itapeva,
One - Bela Vista 01332-000 - São Paulo - SP - Brazil
TEL: +55-12-3932-2300 / FAX: +55-12-3932-237

Mexico: Delta Electronics International Mexico S.A. de C.V.

Gustavo Baz No. 309 Edificio E PB 103
Colonia La Loma, CP 54060
Tlalnepantla, Estado de México
TEL: +52-55-3603-9200

EMEA

EMEA Headquarters: Delta Electronics (Netherlands) B.V.

Sales: Sales.IA.EMEA@deltaww.com
Marketing: Marketing.IA.EMEA@deltaww.com
Technical Support: iatechnicalsupport@deltaww.com
Customer Support: Customer-Support@deltaww.com
Service: Service.IA.emea@deltaww.com
TEL: +31(0)40 800 3900

BENELUX: Delta Electronics (Netherlands) B.V.

Automotive Campus 260, 5708 JZ Helmond, The Netherlands
Mail: Sales.IA.Benelux@deltaww.com
TEL: +31(0)40 800 3900

DACH: Delta Electronics (Netherlands) B.V.

Coesterweg 45, D-59494 Soest, Germany
Mail: Sales.IA.DACH@deltaww.com
TEL: +49(0)2921 987 0

France: Delta Electronics (France) S.A.

ZI du bois Challand 2, 15 rue des Pyrénées,
Lisses, 91090 Evry Cedex, France
Mail: Sales.IA.FR@deltaww.com
TEL: +33(0)1 69 77 82 60

Iberia: Delta Electronics Solutions (Spain) S.L.U

Ctra. De Villaverde a Vallecas, 265 1º Dcha Ed.
Hormigueras – P.I. de Vallecas 28031 Madrid
TEL: +34(0)91 223 74 20

Carrer Llacuna 166, 08018 Barcelona, Spain

Mail: Sales.IA.Iberia@deltaww.com

Italy: Delta Electronics (Italy) S.r.l.

Via Meda 2-22060 Novedrate(CO)
Piazza Grazioli 18 00186 Roma Italy
Mail: Sales.IA.Italy@deltaww.com
TEL: +39 039 8900365

Russia: Delta Energy System LLC

Vereyskaya Plaza II, office 112 Vereyskaya str.
17 121357 Moscow Russia
Mail: Sales.IA.RU@deltaww.com
TEL: +7 495 644 3240

Turkey: Delta Greentech Elektronik San. Ltd. Sti. (Turkey)

Şerifali Mah. Hendem Cad. Kule Sok. No:16-A
34775 Ümraniye – İstanbul
Mail: Sales.IA.Turkey@deltaww.com
TEL: + 90 216 499 9910

MEA: Eltek Dubai (Eltek MEA DMCC)

OFFICE 2504, 25th Floor, Saba Tower 1,
Jumeirah Lakes Towers, Dubai, UAE
Mail: Sales.IA.MEA@deltaww.com
TEL: +971(0)4 2690148