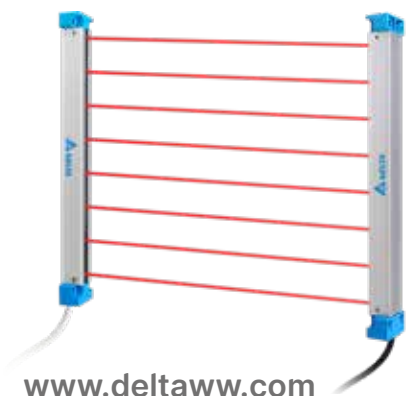




Digitized Automation for a Changing World

# Delta Compact Area Sensor AS-E Series



[www.deltaww.com](http://www.deltaww.com)



# Compact Area Sensor AS-E Series

Small connector type sensor for time-saving installation and maintenance. The sensor can be applied to a wide range of applications, such as logistics, packaging, components, woodworking, warehousing industries and other industrial automation production lines

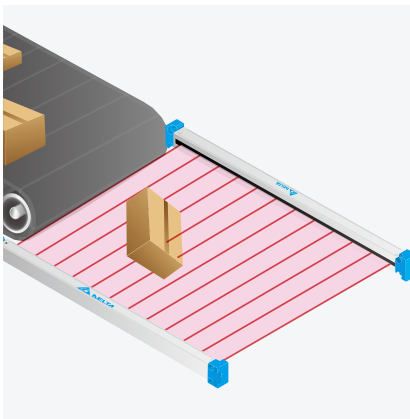
- No need for brackets; Easy installation
- Light aluminum case
- Connector wiring, easy for wiring
- Detection range up to 4 m



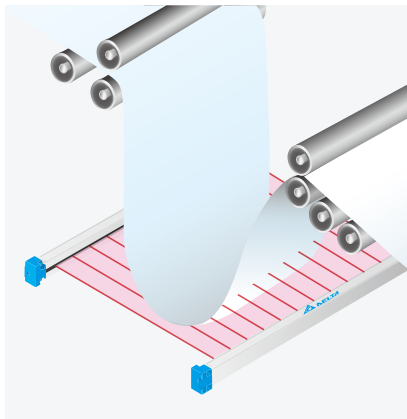
## Applications

### Area Sensing

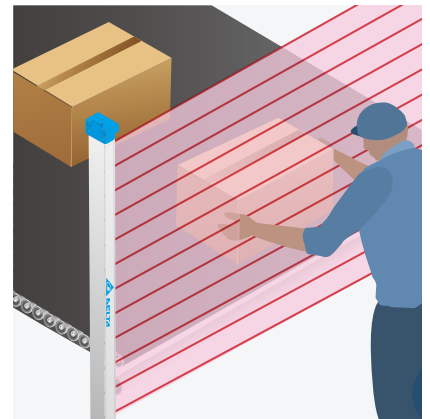
Detects objects passing through an arranged area



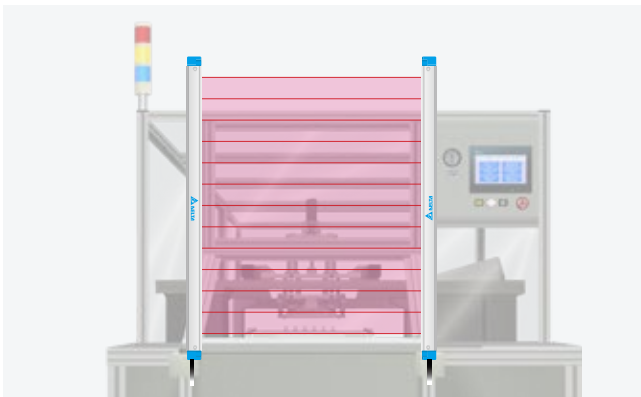
Detects objects that fall off the conveyor or pass through the incorrect path



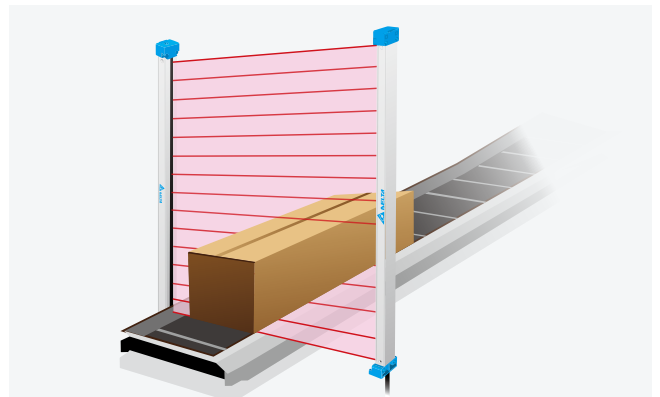
Rolling loop detection



Detects incorrect object pickup



Detects objects passing the detection zone



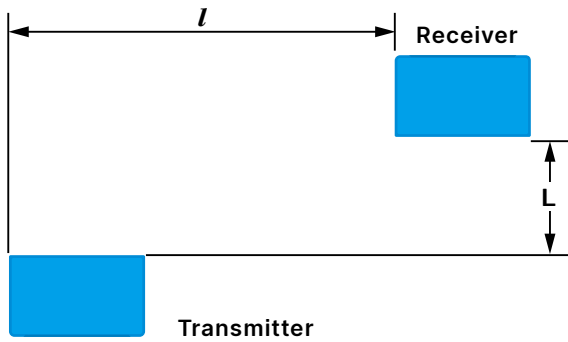
Detects objects during conveyance

 **Warning: Do not use this product as a sensing device for personnel protection.**

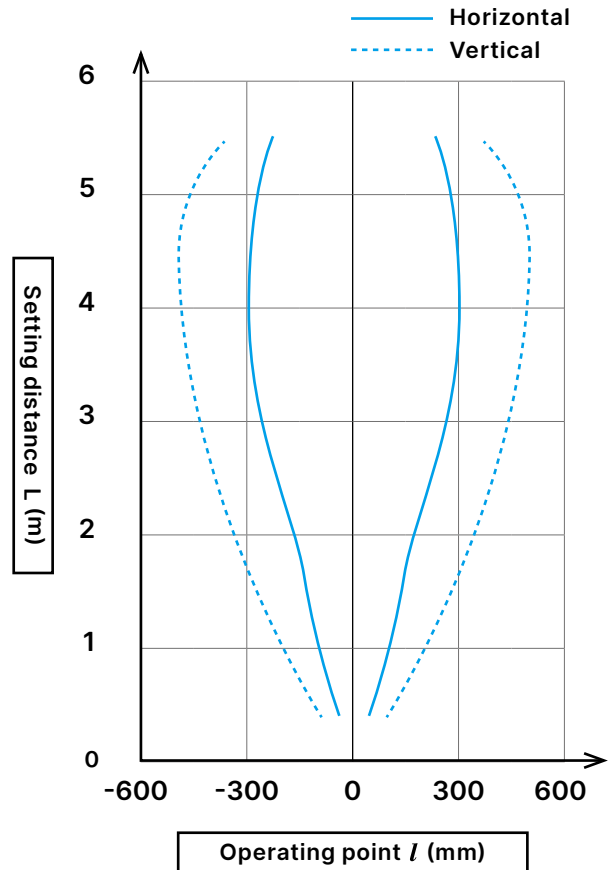
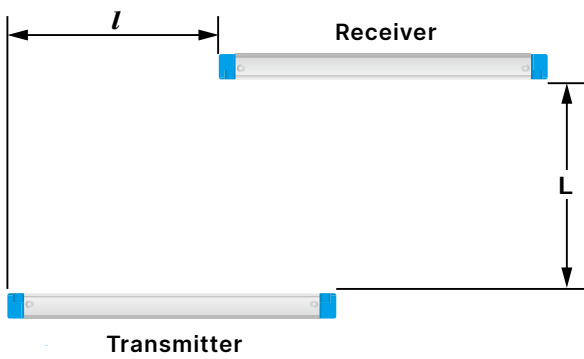
# Optical Properties (Typical)

## Parallel Deviation

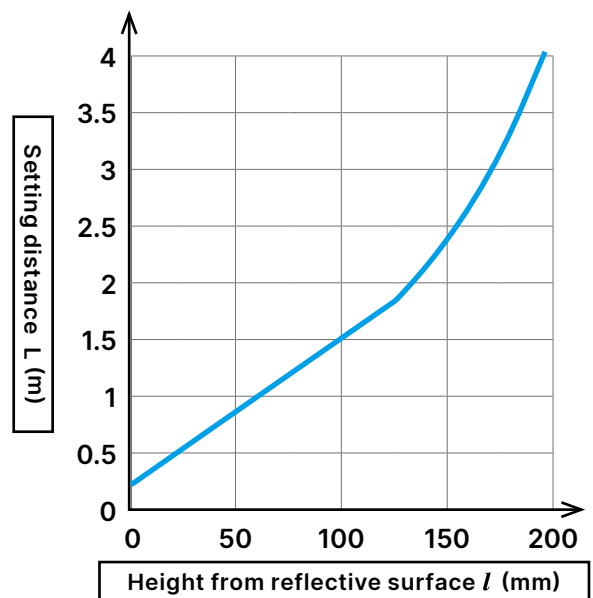
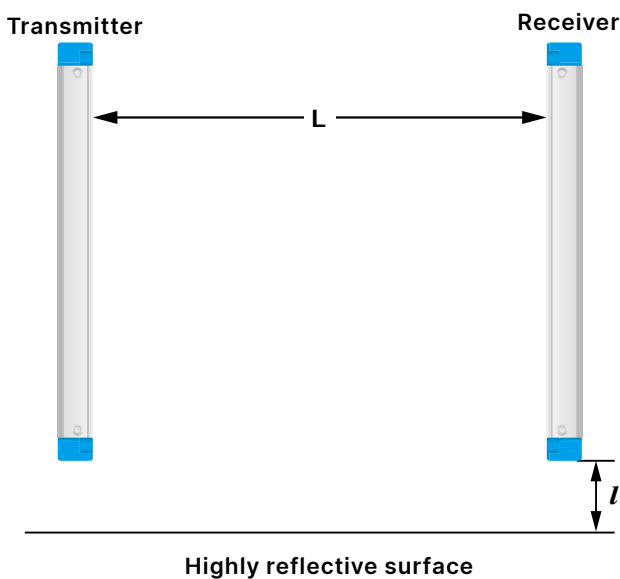
### Horizontal direction



### Vertical direction



## Sensing characteristics for installing on highly reflective surface\*



\* Operating on highly reflective surface should still be avoided.

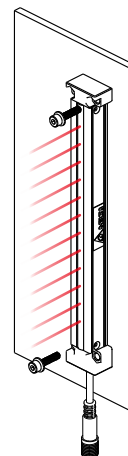
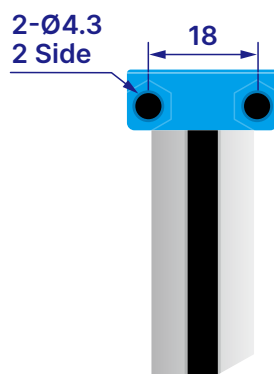
## Specifications

<b>Sensing Object</b>	Opaque objects larger than $\phi$ 30 mm / $\phi$ 1.18 inch
<b>Beam Pitch</b>	20 mm
<b>Sensing Range</b>	0.6 ~ 4 m
<b>Input Voltage</b>	24 V <sub>DC</sub> $\pm$ 10 %
<b>Sampling Rate</b>	< 30 ms
<b>Protection Circuit</b>	Protection against reverse voltage, output overcurrent, power supply surges, and output surges
<b>Operating Temperature</b>	-10 ~ 55 °C (non-freezing)
<b>Storage Temperature</b>	-20 ~ 60 °C
<b>Ambient Humidity</b>	35 ~ 85 % (non-condensing)
<b>Enclosure Rating</b>	IP40
<b>Light Source</b>	Infrared (850 nm)
<b>Ambient Light Resistance</b>	Sunlight: Illumination of the light-receiving surface 10,000 lux
<b>Vibration Resistance</b>	10 ~ 55 Hz, 1.5 mm, 3 axes for 2 hours
<b>Shock Resistance</b>	Up to 100 m/S <sup>2</sup> , 3 times in each of 3 axes/6 directions
<b>Insulating Resistance</b>	20 M $\Omega$ or more (500 V <sub>DC</sub> )
<b>Withstanding Voltage</b>	1,000 V <sub>AC</sub> 50/60 Hz, 1 min
<b>Material</b>	Case: Aluminum extrusion / Cover Lens: PMMA / Upper / Lower Case: PC + ABS
<b>Cable</b>	150 mm PVC Cable with a connector
<b>Certification</b>	CE

## Installation

### Front Installation

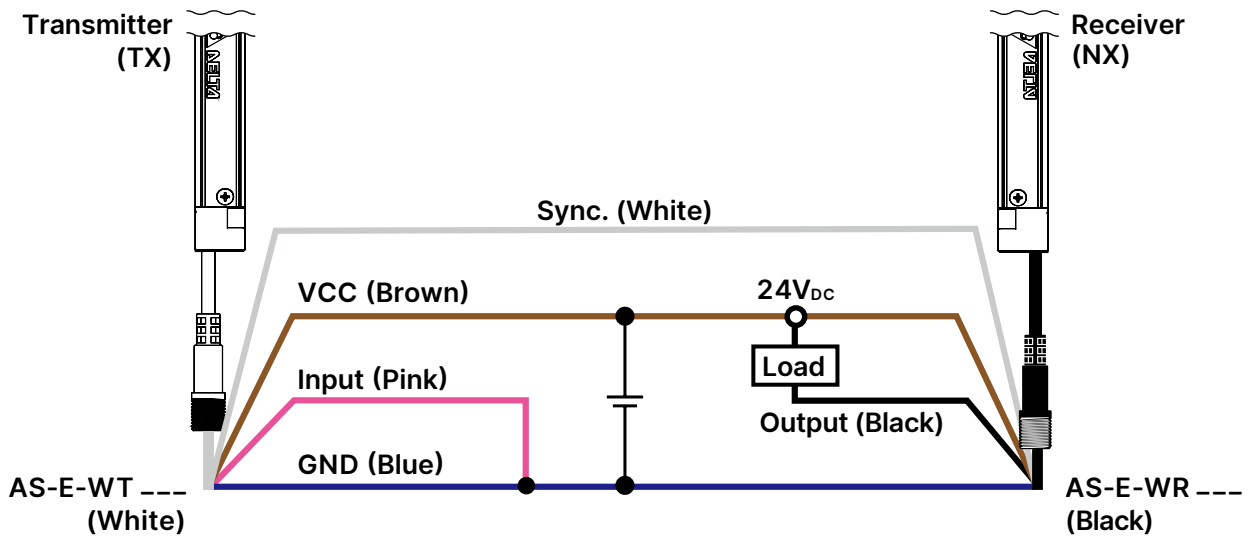
Unit : mm



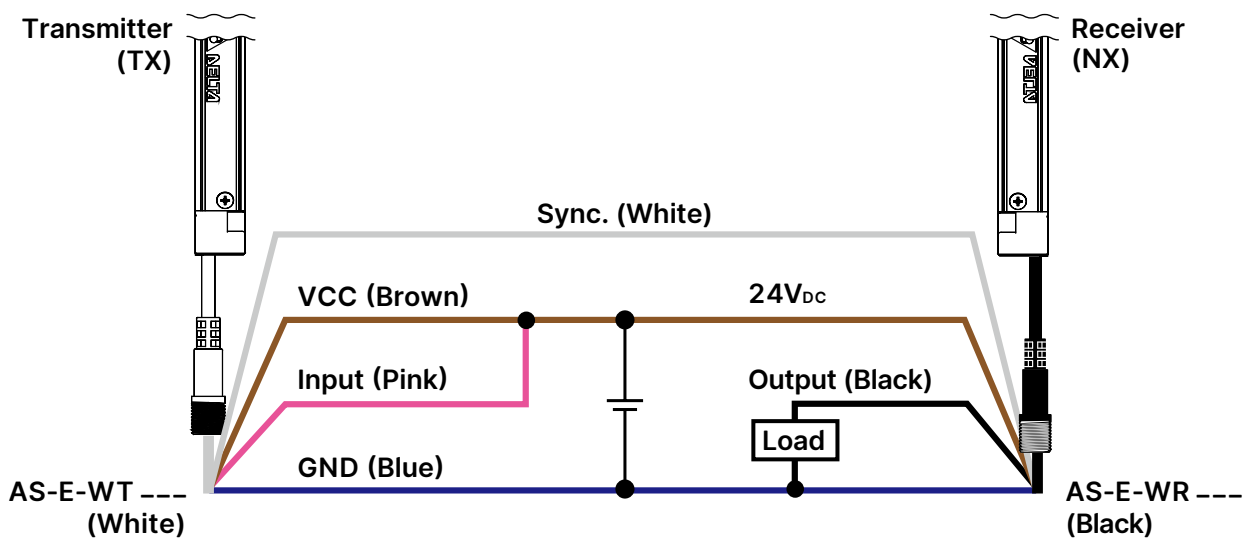
- Cables are not included for the transmitter and receiver. Choose a suitable cable length per wiring requirements. Prepare M4 screws with washers and M4 nuts before installation.
- For front installation, use screws of 12 mm + screwing depth.
- During installation, do not twist or bend the product. Please apply the screw tightening torque of 5.5 ~ 7.5 kfg-cm.

# Wiring

## NPN Output Connection

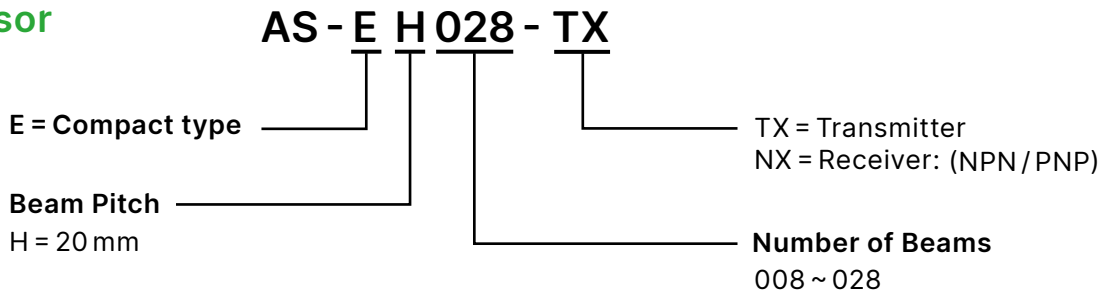


## PNP Output Connection

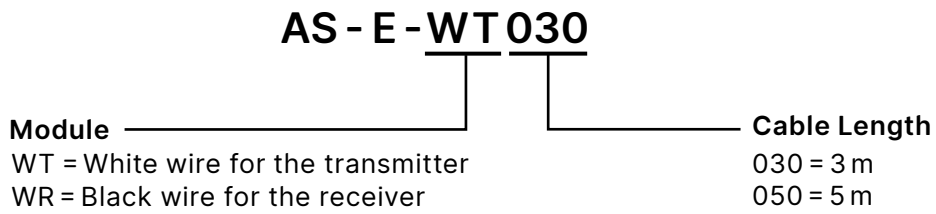


# Model Information

## Area Sensor

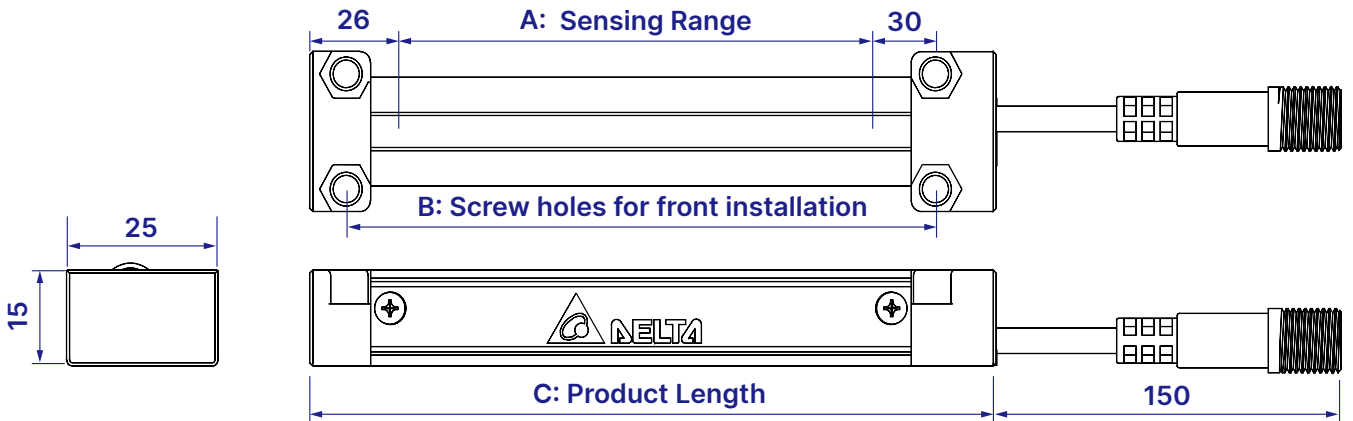


## Cable



# Dimensions

Unit: mm



Model	A (mm)	B (mm)	C (mm)	Weight (g)
AS-EH008---	140	180	196	68
AS-EH012---	220	260	276	90
AS-EH016---	300	340	356	113
AS-EH020---	380	420	436	135
AS-EH024---	460	500	516	160
AS-EH028---	540	580	596	184

# Ordering Information

## Area Sensor

Model	Number of Beams	Sensing Height (mm)	Product Length (mm)	Sensing Range (m)
AS-EH008-__	8	140	196	0.6~4
AS-EH012-__	12	220	276	
AS-EH016-__	16	300	356	
AS-EH020-__	20	380	436	
AS-EH024-__	24	460	516	
AS-EH028-__	28	540	596	

\*Note 1: \_\_ = TX (Transmitter)/NX (Receiver)

\*Note 2: The transmitter and receiver are for sale separately. Please make sure if you need to purchase both.

## Accessory Cables

For Transmitter	For Receiver	Length (m)
AS-E-WT030	AS-E-WR030	3
AS-E-WT050	AS-E-WR050	5







Smarter. Greener. Together.

## 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 2, Building A, 18-24 Ricketts Road,  
Mount Waverley, Victoria 3149 Australia  
Mail: IA.au@deltaww.com  
TEL: +61-1300-335-823 / +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 Ltd.

Estrada Velha Rio-São Paulo, 5300 Eugênio de  
Melo - São José dos Campos CEP: 12247-004 - 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