

AST Aluminum Extrusion Catalog 2025

Menu

3-4- A5 Series for Aluminum Extrusion

5- A5 Pyrometers - Installation versions on Extrusion press

6-9- A5-S-EX \ A5-EX

10-12- A5-EX-FO \ A5-EX-FO Portable

13-15- A5-S-IN \ A5-IN

- Company details

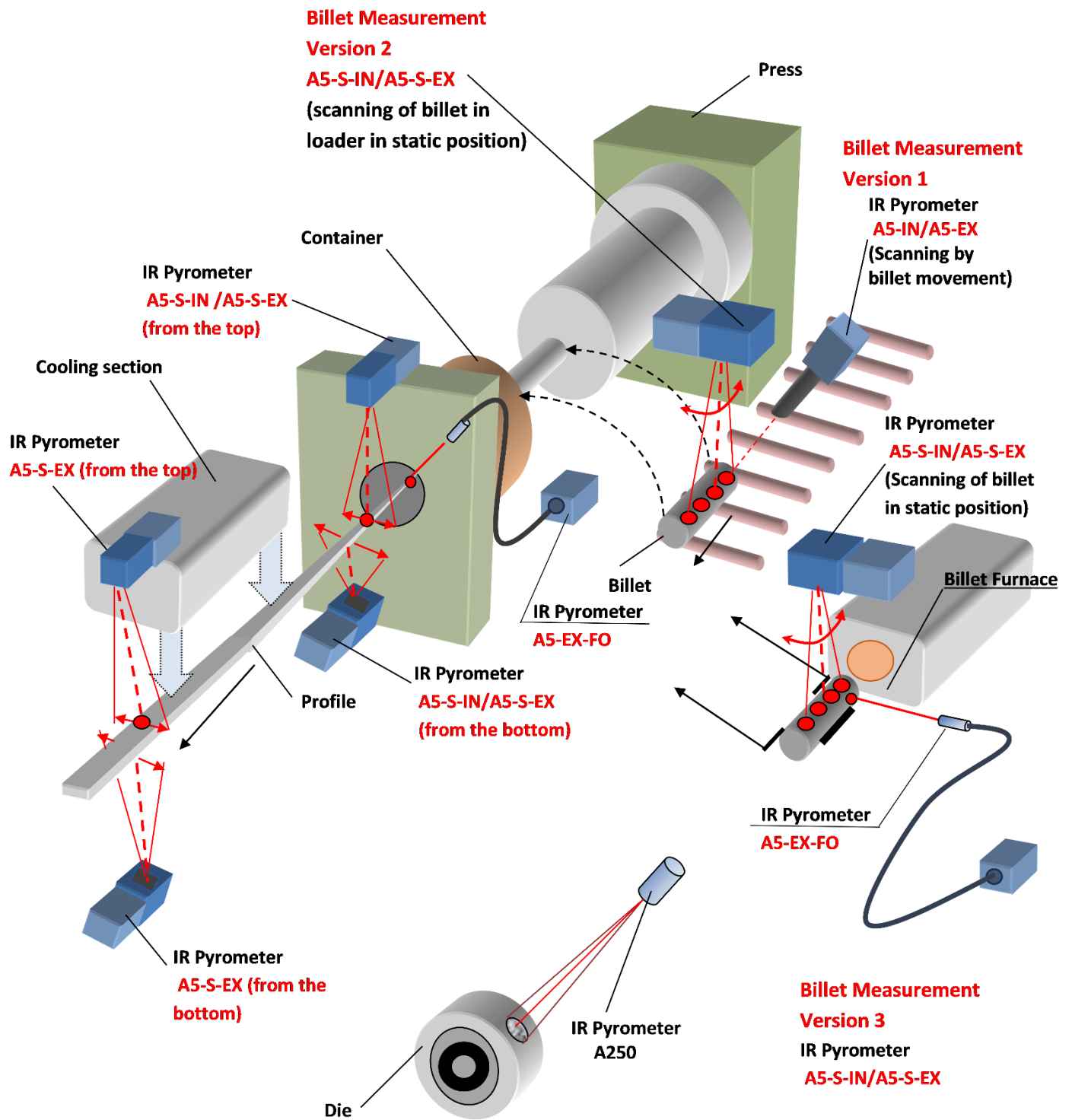
A5 Series for Aluminum Extrusion

A5 Specifications	
Temperature Limits	221 to 5432°F / 105 to 3000°C (actual ranges vary by model)
Spectral Response	Range of selected bands according to temperature range selection
Optical Resolution	Range of optics selectable by model
Accuracy	±1% or 0.25% ± 2°C (3.6°F) of measured value for full range of emissivity
Repeatability	
Response and Update Time	Adjustable from 0.1 sec to 17 sec
Analog Output	4-20 mA, 0-20 mA, 0-10V, K Type T/C
Digital Communications	RS-232, RS485, USB, Bluetooth
Human Interface	PC Software and Android Applications.
Measured Parameters	Filtered and Unfiltered Temperature, Ambient Temperature, Emissivity.
Input Power	24Vdc
Ambient Temperature Limits	32 to +122°F / 0 to +50°C Optical head and Fiber Optic Cable up to 250°C
Enclosure Rating	IP65
Weight	~4.4lbs / ~2.0Kg or 7.5lbs / 3.4Kg with scanner
Dimensions	8.46 x 4.33 x 4.13 in / 215 x 110 x 105 mm or 14 x 4.33 x 4.13 in / 355 x 110 x 105 mm
Certification	A calibration certificate is standard with each unit. CE: EMI/ RFI for heavy industry
Warranty	2 years



Model	Temperature Range		Traditional Style Optical Res.	Optical Res. Fiber Optic	Fiber Cable Type of	Cable Length Max Fiber
	Fahrenheit	Celsius				
A5-EX A5-S-EX	221-1652°F	105-900°C	D/100	n/a	n/a	n/a
	392-2984°F	200-1640°C	D/200	n/a	n/a	n/a
	482-3362°F	250-1850°C	D/200	n/a	n/a	n/a
	680-4532°F	360-2500°C	D/200	n/a	n/a	n/a
A5-IN A5-S-IN	572-1832°F	300-1000°C	D/100	n/a	n/a	n/a
	662-2372°F	350-1300°C	D/200	n/a	n/a	n/a
	716-2732°F	380-1500°C	D/200	n/a	n/a	n/a
	824-3632°F	440-2000°C	D/200	n/a	n/a	n/a
A5-EX-FO A5-EX-FO Portable Possible ranges in the product brochure	338-5432°F	170-3000°C	n/a	D/200	Quartz	20m

Extrusion Line with temperature control Pyrometer A5



AST A5-S-EX \ A5-EX

105°C to 900°C (221°F - 1652°F) • 200°C - 1640°C (392°F - 2984°F) • 250°C - 1850°C (482°F - 3362°F) • 360°C - 2500°C (680°F - 4532°F)

AST A5-S-EX \ A5-EX is a specially designed IR Pyrometer for non-contact temperature measurement of aluminum.

AST A5-S-EX \ A5-EX is a multi-wavelength plug-and-play pyrometer that uses an application-specific database derived from years of experience in an actual application.

AST A5-S-EX \ A5-EX uses unique algorithms to calculate the actual temperature and emissivity of the surface accurately.

AST A5-S-EX \ A5-EX can hold multiple databases so that a single instrument can easily switch between applications, such as Molten metal, extruded profiles, Rolled aluminum surfaces, Continuous casting, Aluminum billets, and Slabs.

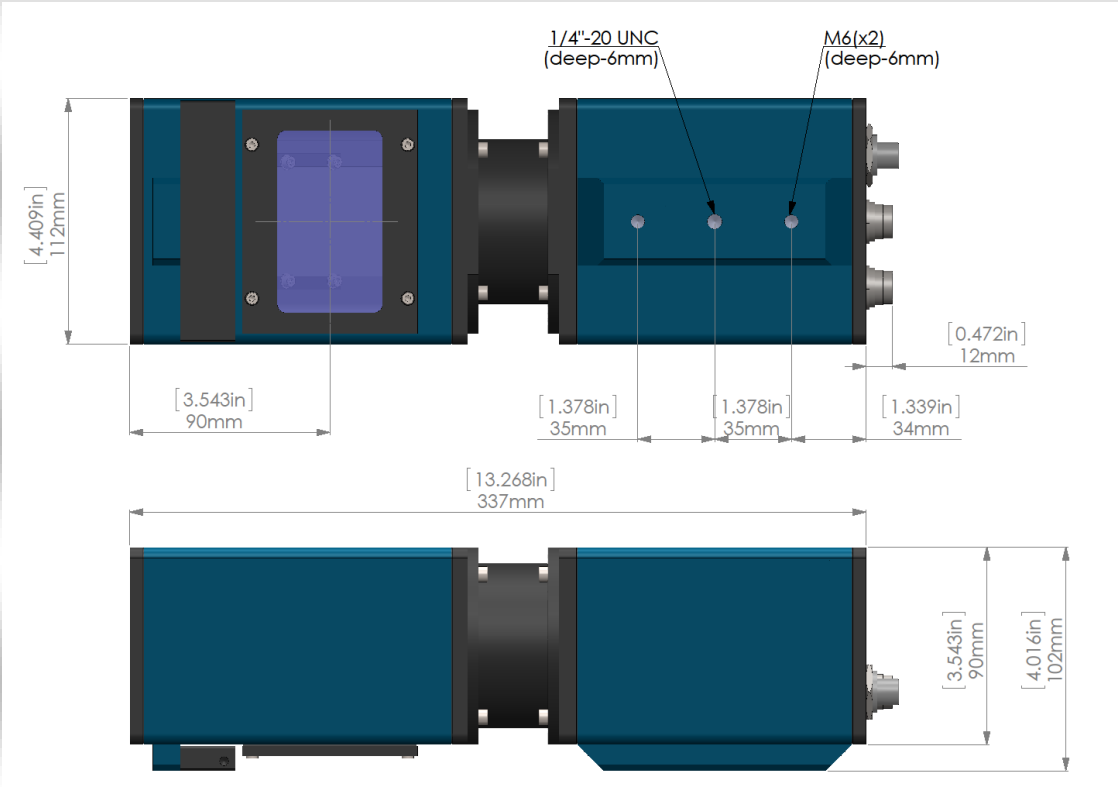
AST A5-S-EX \ A5-EX has a laser pointer aligned in line with the detector to ensure both the laser and detector look in the same spot. This helps with precise aiming even at long distances.

AST A5-S-EX \ A5-EX offers Bluetooth communication to communicate with Android smartphones or laptops to view the measured temperature and adjust the parameters/selection of database and data logging



Specification	Model A5-S-EX \ A5-EX	
Temperature Range (Analog sub-range adjustable)	105 - 900°C	221 - 1652°F
	200 - 1640°C	392 - 2984°F
	250 - 1850°C	482 - 3362°F
	360 - 2500°C	680 - 4532°F
Spectral Range	2.1...2.4 μ m	
Photodetector Type	InGaAs Extended	
Humidity	IP65	
Response Time	Adjustable from 0.1 sec to 17 sec	
Default Value	0.5 sec	
Accuracy and Repeatability	±1%	
Sighting	Integrated Laser Pilot Light	
Power Supply	24VDC	
Analog Output	4-20 mA, 0-20 mA, 0-10V, Alarm	
Digital Output	RS-232, RS485, RS-422, USB, Bluetooth	
Digital Display	P110	
Adjustable Scanning Range	Up to ±20°	
Adjustable Scanning Step	From 0.1 to 5°	
Number of Automatically Scanning Modes	4	
Pyrometer Scanner Overall Dimensions	355 x 110 x 105 mm	
Pyrometer Scanner Weight	3.4Kg	
Operating temperature range	0°C to +50°C / 32°F to +122°F	
Storage temperature range	-20°C to +70°C / -4°F to +158°F	

Measuring Distances [mm] / [in]	A5-S-EX \ A5-EX Spot Sizes [mm] / [in]			
	FOV 1:100	FOV 1:200		
	105 - 900°C 221- 1652°F	200 - 1640°C 392 - 2984°F	250 - 1850°C 482 - 3362°F	360 - 2500°C 680 - 4532°F
500 / 20	5 / 0.2	2.5 / 0.1		
1000 / 40	10 / 0.4	5 / 0.2		
1500 / 60	15 / 0.6	7 / 0.3		
2000 / 80	20 / 0.8	10 / 0.4		
2500 / 100	25 / 1.0	12.5 / 0.5		
5000 / 200	50 / 2.0	25 / 1.0		



A5-EX-FO \ A5-EX-FO Portable: 170 to 3000°C (338 - 5432°F)



AST A5-EX-FO is a specially designed IR Pyrometer for non-contact temperature measurement of aluminum.


AST A5-EX-FO is a multi-wavelength plug-and-play pyrometer that uses an application-specific database derived from years of experience in real applications.

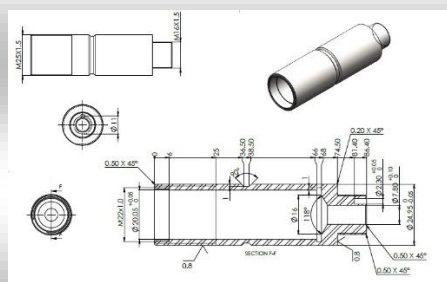
AST A5-EX-FO uses unique algorithms to calculate the actual temperature and emissivity of the surface accurately.

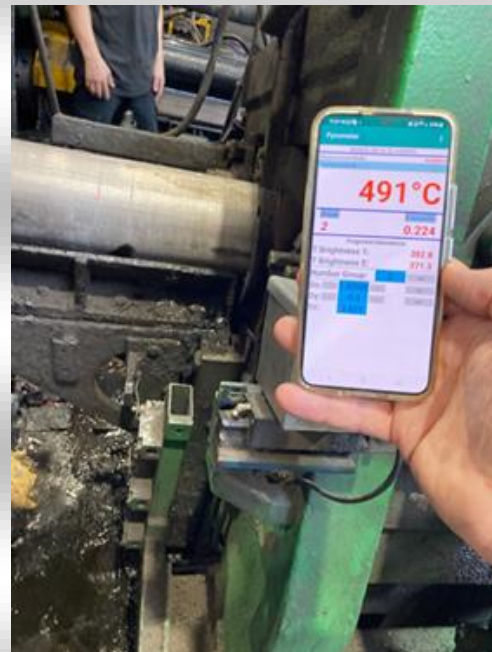
AST A5-EX-FO can hold multiple databases so that a single instrument can easily switch between applications such as Molten metal, extruded profiles, Rolled aluminum surfaces, Continuous casting, Aluminum billets, and Slabs.

Its laser pointer is aligned with the detector, ensuring that both laser and detector are aimed into the same spot. This

Specification	(Range 2.0-2.5mkm, InGaAs Extended)	
Temperature Range (Analog sub-range adjustable)	170 - 980°C	338- 1790°F
	450 -1500°C	842 - 2732°F
	500-3000°C	932 - 5432°F
Spectral Range	2.1μ / 2.4μ	
Photodetector Type	InGaAs Extended	
Distance to Spot Size Ratio	See the table of spot sizes.	
Protection Class	IP65	
Response Time t90	Adjustable from 0.1 sec to 17 sec	
Accuracy and Repeatability	0.25% ± 2°C (3.6°F) of measured value for the full range of emissivity	
Sighting	Integrated Laser Pilot Light 650-670nm	
Power Supply	24VDC	
Analog Output	4-20 mA, 0-20 mA, 0-10V, K Type T/C	
Digital Output	RS-232, RS-422, RS-485, USB, Bluetooth Modbus, OpenBus	
Digital Display	P110	
Sensor overall dimensions	215 x 110 x 105 mm / 8.46 x 4.33 x 4.13 in	
Sensor weight	~2.0Kg / ~4.4lbs	
Operating temperature range	0°C +50°C / 32°F +122°F	
Storage temperature range	-20°C +70°C / -4°F +158°F	

Optical Head II	Working Distances (mm) / [in]	Spot Sizes (mm) / [in]
	90 / 3.6	1.5 / 0.059
	140 / 5.5	1.8 / 0.07
	200 / 7.9	3.0 / 0.11
	600 / 23.6	9.0 / 0.35
	4500 / 177.1	69.0 / 2.71





AST A5-S-IN \ A5-IN

350 to 1300°C (662 - 2372°F) • 380 to 1500°C (716- 2732°F) 440 to 2000°C (824 - 3632°F)

AST A5-S-IN \ A5-IN is a specially designed IR Pyrometer for non-contact temperature measurement of aluminum.

AST A5-S-IN \ A5-IN is a multi-wavelength plug-and-play pyrometer that uses an application-specific database derived from years of experience in an actual application.

AST A5-S-IN \ A5-IN uses unique algorithms to calculate the actual temperature and emissivity of the surface accurately.

AST A5-S-IN \ A5-IN can hold multiple databases so that a single instrument can easily switch between applications, such as Molten metal, extruded profiles, Rolled aluminum surfaces, Continuous casting, Aluminum billets, and Slabs.

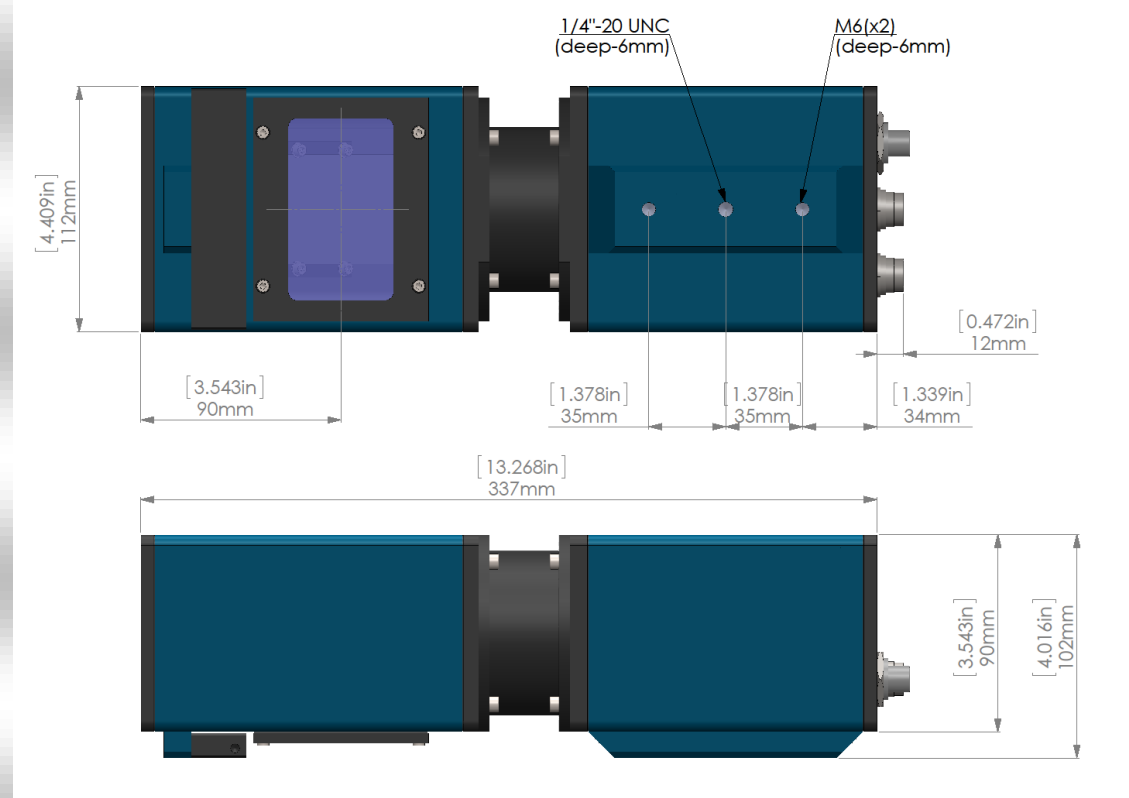
AST A5-S-IN \ A5-IN has a laser pointer aligned in line with the detector to ensure both the laser and detector look in the same spot. This helps with precise aiming even at long distances.

AST A5-S-IN \ A5-IN offers Bluetooth communication to communicate with Android smartphones or laptops to view the measured temperature and adjust the parameters/selection of database and data logging



Specification	Model A5-S-IN \ A5-IN	
Temperature Range (Analog sub-range adjustable)	350 - 1300°C	662 - 2372°F
	380 - 1500°C	716 - 2732°F
	440 - 2000°C	824 - 3632°F
Spectral Range	1.3...1.6 μm	
Photodetector Type	InGaAs	
Humidity	IP65	
Response Time	Adjustable from 0.1 sec to 17 sec	
Default Value	0.5 sec	
Accuracy and Repeatability	$\pm 1\%$	
Sighting	Integrated Laser Pilot Light	
Power Supply	24VDC	
Analog Output	4-20 mA, 0-20 mA, 0-10V, Alarm	
Digital Output	RS-232, RS485, RS-422, USB, Bluetooth	
Digital Display	P110	
Adjustable Scanning Range	Up to $\pm 20^\circ$	
Adjustable Scanning Step	From 0.1 to 5°	
Number of Automatically Scanning Modes	4	
Pyrometer Scanner Overall Dimensions	355 x 110 x 105 mm / 14 x 4.33 x 4.13 in	
Pyrometer Scanner Weight	3.4Kg / 7.5lbs	
Operating temperature range	0 s +50°C / 32 to +122°F	
Storage temperature range	-20 to +70°C / -4 to +158°F	

Measuring Distances [mm] / [in]	A5-S-IN \ A5-IN Spot Sizes [mm] / [in]		
	FOV 1:100	FOV 1:200	
	350 - 1300°C 662 - 2372°F	380 - 1500°C 716 - 2732°F	440 - 2000°C 824 - 3632°F
500 / 20	5 / 0.2	2.5 / 0.1	
1000 / 40	10 / 0.4	5 / 0.2	
1500 / 60	15 / 0.6	7 / 0.3	
2000 / 80	20 / 0.8	10 / 0.4	
2500 / 100	25 / 1.0	12.5 / 0.5	
5000 / 200	50 / 2.0	25 / 1.0	



Accurate Sensors Technologies

Misgav Industrial Park, Misgav 2017400 Israel Ph.: +972-4-9990025
E-mail: sales@accuratesensors.com
www.accuratesensors.com