

Static Sensor

SK-T Series



EtherCAT[®] RS-232C / RS-485

EtherNet/IP[™] Ethernet (TCP/IP)



Ask SENPUM

+86-755-83330055

Fast Delivery

Standard Models



Most products are in stock. Upon receiving your order, we will arrange prompt shipment to minimize your downtime-related costs and losses.



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LINE

The head rotates 180° and can stop at every 45° interval

A bright, wide LCD screen for easy viewing of measurement results.

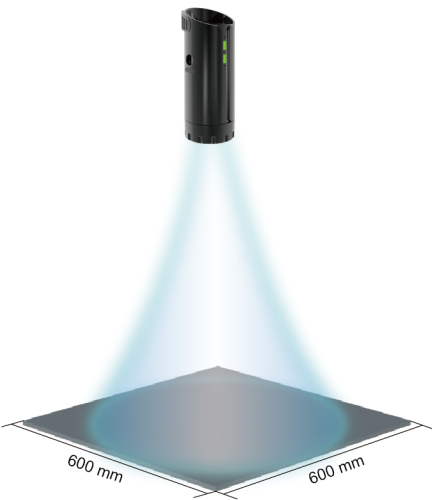


Detection of the charged state of films, resins, etc.

The unique rotating sensor head allows easy detection even in tight spaces.

Non-contact vibrating capacitor electrostatic detection technology

Can be fixed above the object under test, enabling hands-free detection of surface static electricity.



Setting the static alarm threshold

Set the electrostatic safety (alarm) threshold via remote control or monitoring software. A red light alerts when the threshold is exceeded, while the threshold alarm indicator remains red within the safe electrostatic range.

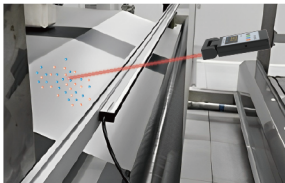
Applicable to electronics, photoelectricity, injection molding, textile and other industries

24/7 continuous electrostatic monitoring with configurable alarm thresholds.

More Features

- Bright, wide LCD display for clear visibility.
- Simple push-button operation for easy measurements.
- MAX mode for capturing peak voltage when measuring fluctuating static, with adjustable airflow control.
- Sensor features error display functionality.

Applications



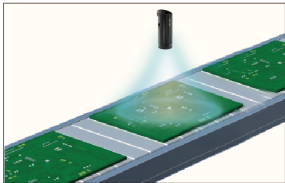
Detecting static charge on films



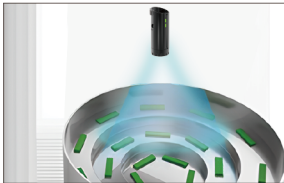
Measuring resin charge on mobile phone casings



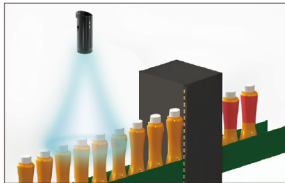
Anti-static testing for molded products



Checking PCB boards for electrostatic presence



Detecting static in vibratory feeders



Assessing electrostatic charge on packaged workpieces

Specifications

Handheld Type

Model	SK-T030
Signal detection method	Vibrating chopper method ^{*1}
Data update display frequency	0.5-second intervals
Measurement voltage range	Normal mode: 0.01 to 19.99 kV I.B. mode: 0.001 to 1.999 kV
Measurement distance	30 mm (between measured object and sensor)
Measurement distance adjustment	Red LED focus beam (focal distance: 30 mm)
Sensor head rotation angle	180° rotation (stoppable at every 15°)
Display section	Built-in LED backlight display
Polarity display	+ Polarity · - Polarity display
Mode switching	Switching with the MODE button
Battery check	Shows battery balance on the display
Power supply	DC 9 V square alkaline battery
Operating temperature	0 to 40 °C
Main unit dimensions	66 × 22 × 138 mm (W×D×H)
Weight	160 g

^{*1} The vibrating chopper mechanism is highly sensitive to impacts such as drops. Avoid subjecting the unit to strong shocks during operation.

Specifications

Online-type Sensor Head

Model	SK-500
Measuring distance	5 to 500 mm
Measuring range	±20 kV
Measuring accuracy	±30 V ^{*1}
Sampling period	Approx. 1 ms
Vibration	< 1 KHz
Noise	< 5 dB
Communication distance	< 300 m
Alarm indication	LED
Threshold setting range	0 to ±5000 V
Detection angle	< 15°
Dimensions	44 × 33 × 85 mm
Mounting accessories	OW-SK501 Mounting rod 5 × 100, OW-SK502 Bracket 40 × 15 × 23
Weight	49.7 g
Power-on standby time	5 s
Infrared control range	< 20°, 1 m

^{*1} SK-500: Measurement range ±300 V or below; other ranges ±10% (of displayed value)

Static Eliminators

- SK3-A
- SK2-A
- SK-H
- SK-E
- SK-V940
- SK-Z300
- SK-Z200
- SK-L
- SK-T

Fiber Optic Sensors

Photoelectric Sensors

Color Sensors

Laser Sensors

Proximity Sensors

Precision Contact Sensors

Area Sensors/
Safety Light Curtains

Laser Scanners

Digital Contact Sensors

Laser Displacemen
Sensors

Laser Micrometers

Confocal Displacement
Sensors

Barcode Readers

AI Vision Sensors

RFID

Infrared Temperature
Sensors

Pressure Sensors

Flow Sensors

Magnetic Sensors

Ultrasonic Sensors

Magnetic Scales

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Static Eliminators

SK-T

Static Sensor

Online-type Controller

Model		NPN/PNP	SK-1000	SK-1050
Main module/Expansion module			Main module	Expansion module
Mounting type			DIN rail mounting	
Sensing head compatibility			Available	
Display	Minimum display unit		0.001 kV	
	Display range		±20 kv max	
Analog voltage output			±5 V, 1 to 5 V, 0 to 5 V Output impedance 100 Ω	-
Analog current output			4 to 20 mA Maximum load resistance 350 Ω	
Control input	Zero drift input		NPN: On at 0 V, OFF at 24 V PNP: On at 24 V, OFF at 0 V	
	Timer input			
	Reset input			
	Channel input			
Control output*1	Judgment output		Open collector, 50 mA max (NPN/PNP; NO/NC, switchable)	
	Alarm output		Open collector, 50 mA max (NPN/PNP; normally closed, non-switchable)	
Power supply	Power voltage*1		15 to 30 VDC, including ripple (P-P) 10%	Power supply through the main unit
	Power consumption (without load)		1950 mW or less (at 30 V, 65 mA max.)	1800 mW or less (at 30 V, 60 mA max.)
Ambient temperature			-10 to +50 °C (no freezing)	
Ambient humidity			35 to 85% RH (no condensation)	
Material			Housing: polycarbonate; Pushbuttons: polyacetal; Cable: PVC	
Weight (including accessories)			Approx. 150 g	Approx. 140 g

*1 When connecting extension devices, the following restrictions apply depending on the number of connected units.
When connecting 2 to 8 units (including the main unit):
- Power supply voltage: 20 to 30 VDC
- Control output current: Maximum 20 mA



In order to use the product safely, please be sure to read the Instruction Manual carefully before use.

Network Communication Unit

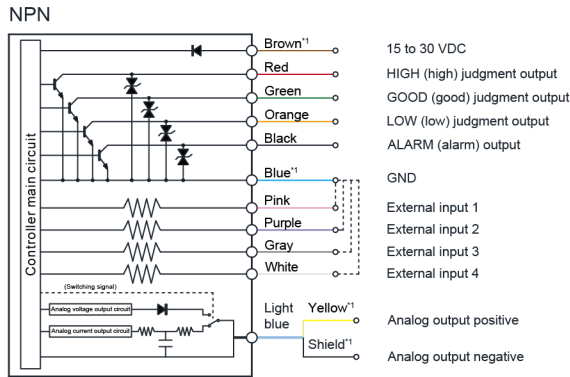
Appearance	Network	Model
	EtherCAT	OW-EC2A
	PROFINET	OW-PN2
	Ethernet (TCP/IP)	OW-EN2
	EtherNet/IP™	OW-EP2
	RS-232C / RS-485	OW-RS1A

Connecting cable between sensor head and controller (sold separately)

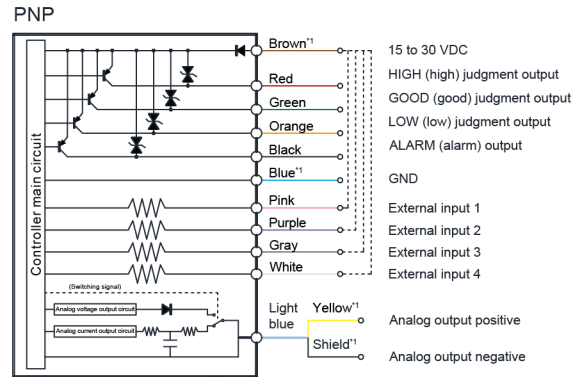
Appearance	Cable length	Model
	5 m	OW-SK-TP5000
	10 m	OW-SK-TP10M
	15 m	OW-SK-TP15M



I/O Circuit Diagrams



*1 Main module only.

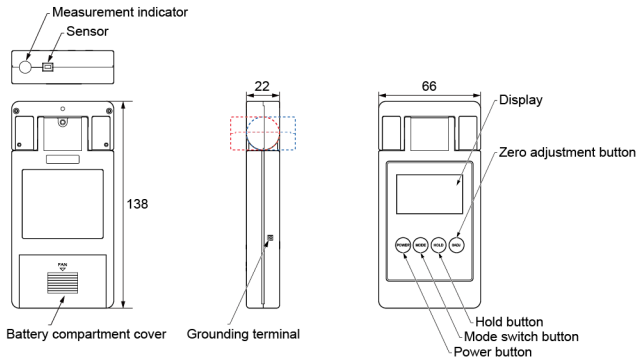


*1 Main module only.

Dimensions

Handheld Type

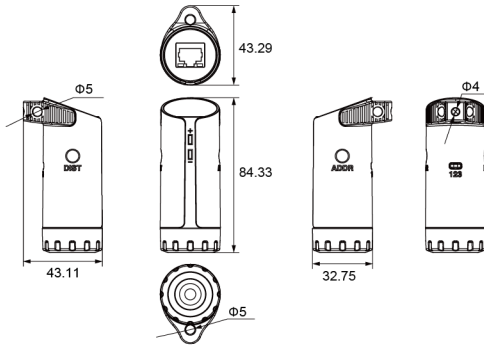
SK-T030



Unit: mm

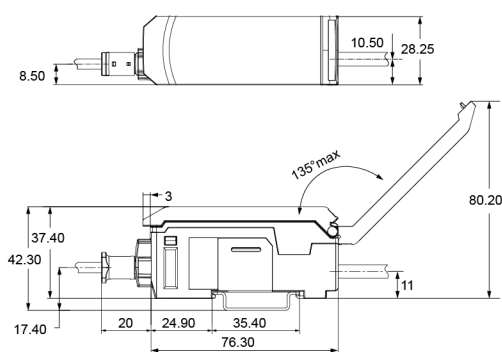
Online-type Sensor Head

SK-500

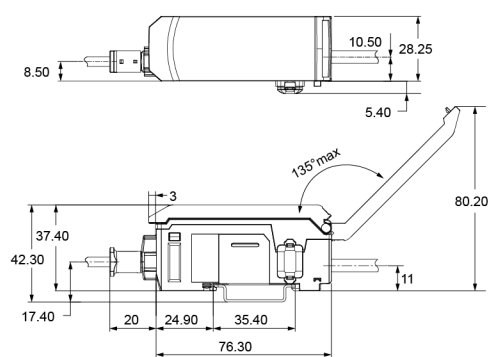


Online-type Controller

SK-1000



SK-1050



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