



SENTRY[®]
SENTRY OPTRONICS CORP.

SENTRY[®]
SENTRY OPTRONICS CORP.

Tel : 886-2-2956-8198

Fax : 886-2-2956-7662

<http://www.sentrytek.com.tw>

E-mail : dlin@sentrytek.com.tw
sales2@sentrytek.com.tw

3F., No.122, Sec.1, Sanmin Road, Ban-Ciao Dist.,
NewTaipei City 220, Taiwan, R.O.C.

Temperature

GAS Detector

Environmental

Test Equipment

SENTRY[®]

SENTRY OPTRONICS CORP.



- █ Founded in 2004**
- █ Outstanding Infrared & Optronic Technology**
- █ Innovated optronic solutions**
- █ Welcome OEM / ODM business**
- █ Private label the current products or new designs by your own**



Temperature

P.1

ST630 / 632	P.2
ST633	P.2
ST631	P.3
ST640 / 642 / 643	P.3
ST650 / 652 / 653	P.4
ST656 / 658	P.4
ST660 / 662 / 663	P.5
ST 685 / 688 / 688P / 689	P.5
ST670 / 672 / 675 / 677	P.6
Comparison Table	P.7



GAS Detector

P.8

ST310 / 312	P.9
ST316	P.10



Environmental

P.11

ST730S / 730 / 732 / 733	P.12
ST510 / 512 / 513	P.13
ST520 / 520S / 522	P.14
ST530	P.15
LD1	P.15



Test Equipment

P.16

ST810	P.17
ST816	P.17
ST722 / 723	P.18
ST550	P.19





Thermometer



ST630/632 Infrared Thermometer



ST630/632 series are the economical appliances with infrared application. With the temperature range of -20~320°C (-4~608°F) / -20~500°C (-4~932°F).



Features

- > Rugged and Ergonomic Design
- > DS Ratio 8 : 1
- > Temperature Range -20~320°C (-4~608°F) / -20~500°C (-4~932°F)
- > Resolution 0.5°C (0.5°F) / 0.2°C (0.2°F)

Model name	ST630	ST632
Temperature Range	-20~320°C (-4~608°F)	-20~500°C (-4~932°F)
Accuracy	±2% of reading or ±2.0°C (±3.6°F) whichever is greater	±2°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~500°C (212~930°F)
Resolution	0.5°C / 0.5°F	0.2°C / 0.2°F
Response Time	500 ms	
Emissivity	0.95 fixed	
Distance/Spot Ratio	8 : 1	
Dimensions	156x100x32mm (6.14"x3.94"x1.26")	
Weight	130g (4.59 oz.)	
Accessories	9V Battery, Instruction manual, Box	

ST633 Infrared Thermometer



ST633 evolves from ST630/632 series and gives higher CP value to offer better temperature range, DS ratio and other extra functions.

Features

- > Mini, Compact and Easy to carry
- > DS ratio 12 : 1
- > Temperature Range -35~630°C (-31~1,166°F)
- > Resolution 0.1°C (0.1°F)
- > Emissivity Selectable 0.95 / 0.70 / 0.30



Model name	ST633
Temperature Range	-35~630°C (-31~1,166°F)
Accuracy	±2.5°C (±4.5°F) From -35~0°C (-31~32°F), ±1.5°C (±2.7°F) From 0~100°C (32~212°F), ±2% From 100~630°C (212~1,166°F)
Resolution	0.1°C / 0.1°F
Response Time	500 ms
Emissivity	0.95 / 0.70 / 0.30
Distance/Spot Ratio	12 : 1
Dimensions	156x100x32mm (6.14"x3.94"x1.26")
Weight	136g (4.8 oz.)
Accessories	9V Battery, Instruction manual, Box

ST631 Forehead Infrared Thermometer



ST631 is a forehead non-contact infrared measuring instrument for human temperature evaluation and also easy use for household appliances.



Features

- > Dual temperature measurement including forehead and normal temperature.
- > Non-contact and Hygienic without changing cap or touching different human body, preventing infection.
- > Simply press the trigger and read temperature on a large digital display.
- > Special design for detecting the deviating from normal temperature measurement on human body.
- > Easy and simple to operate, quick response.

Model name	ST631
Forehead	35~42°C (95~107.6°F)
Household	0~100°C (32~212°F)
Accuracy	Forehead : ±0.3°C (±0.5°F) Household : ±1°C (±1.8°F)
Resolution	0.1°C (0.1°F)
Response Time	1 sec.(Forehead) / 0.5 sec.(Household)
Distance	2~5cm (0.79"~1.97")
Dimensions	156x100x32mm (6.14"x3.94"x1.26")
Weight	125g (4.41 oz.)
Accessories	9V Battery, Instruction manual, Box

ST650 / 652 / 653 Infrared Thermometer



ST650/652/653 series are non-contact infrared temperature measuring instruments.



Features

- > Rugged and Compact for low temperature
- > DS Ratio 12 : 1
- > Temperature range -32~535°C (-25.6~995°F)
- > Resolution 0.1°C (0.1°F)

Model name	ST650	ST652	ST653
Temperature Range	-32~535°C (-25.6~995°F)		
Accuracy	±3.0°C (±5.4°F) From -32~-20°C (-25.6~-4°F), ±2.0°C (±3.6°F) From -20~-100°C (-4~212°F), ±2% From 100~535°C (212~995°F),		
Resolution	0.1°C / 0.1°F		
Response Time	500 ms		
Emissivity	0.95 fixed	Adjustable 0.1~1.0	
Distance/Spot Ratio	12 : 1		
Dimensions	170x133x45mm (6.69"x5.23"x1.77")		
Weight	163g (5.75 oz.)	187g (6.6 oz.)	
Accessories	9V Battery, Instruction manual, Pouch, Box		

ST640 / 642 / 643 Infrared Thermometer

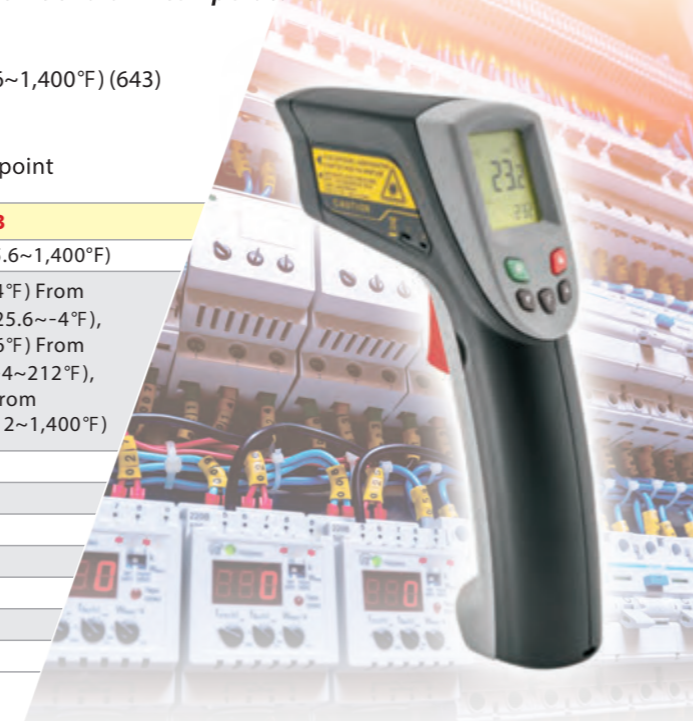


ST640 / 642 / 643 series are the intelligent non-contact infrared temperature measuring instruments. With the eSmart function, it is highly beneficial for users to measure the target temperature without knowing and checking the emissivity of materials. Moreover, the noticeable color signs alert the users when the temperature over the setting point of alarm temperature.

Features

- > Rugged and Ergonomic Design
- > DS ratio 12 : 1
- > Temperature Range -32~535°C (-25.6~995°F) (640/642), -32~760°C (-25.6~1,400°F) (643)
- > Resolution 0.1°C (0.1°F)
- > E-smart : Emissivity automatic measurement
- > CIS : Noticeable color signs alert when the temperature over the setting point

Model name	ST640	ST642	ST643
Temperature Range	-32~535°C (-25.6~995°F)		-32~760°C (-25.6~1,400°F)
Accuracy	±3.0°C (±5.4°F) From -32~-20°C (-25.6~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~535°C (212~995°F)		±3.0°C (±5.4°F) From -32~-20°C (-25.6~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~760°C (212~1,400°F)
Resolution	0.1°C / 0.1°F		
Response Time	500 ms		
Emissivity	0.95 fixed	Adjustable 0.1~1.0	
Distance/Spot Ratio	12 : 1		
Dimensions	180x130x40mm (7.09"x5.12"x1.57")		
Weight	185g (6.53 oz.)	195g (6.9 oz.)	
Accessories	9V Battery, Instruction manual, Pouch, Box		



ST656 / 658 Infrared Thermometer



ST656/658 series are non-contact infrared temperature measuring instruments specifically for low temperature applications. Typically applications include measuring surface temperature of food processing, HVAC energy audit or science experiments.

Features

- > Rugged and Compact for low temperature
- > DS Ratio 12 : 1
- > Temperature range -50~316°C (-58~600°F)
- > Resolution 0.1°C (0.1°F)

Model name	ST656	ST658
Temperature Range	-50~316°C (-58~600°F)	
Accuracy	±3.0°C (±5.4°F) From -50~-30°C (-58~-22°F), ±2.0°C (±3.6°F) From -30~100°C (-22~212°F), ±2% From 100~316°C (212~600°F),	
Resolution	0.1°C / 0.1°F	
Response Time	500 ms	
Emissivity	0.97 fixed	
Distance/Spot Ratio	12 : 1	
Dimensions	170x133x45mm (6.69"x5.23"x1.77")	
Weight	163g (5.75 oz.)	187g (6.6 oz.)
Accessories	9V Battery, Instruction manual, Pouch, Box	



ST660/662/663 Infrared Thermometer

CE RoHS COMPLIANT REACH (SVHC)

ST660/662/663 series are non-contact infrared temperature measuring instruments designed with wide temperature range, especially for high temperature applications.

Features

- › Rugged and Compact for wide temperature requirements
- › DS Ratio 12:1
- › Temperature range -50~999°C (-58~1,830°F)
- › Resolution 1°C (1°F)

Model name	ST660	ST662	ST663
Temperature Range	-50~999°C (-58~1,830°F)		
Accuracy	±3.0°C (±5.4°F) From -50~-20°C (-58~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~999°C (212~1,830°F)		
Resolution	1°C / 1°F		
Response Time	500 ms		
Emissivity	0.95 fixed	Adjustable 0.1 ~ 1.0	
Distance/Spot Ratio	12:1		
Dimensions	170x133x45mm (6.69"x5.23"x1.77")		
Weight	163g (5.75 oz.)	187g (6.6 oz.)	
Accessories	9V Battery, Instruction manual, Pouch, Box		



ST670/672/675/677 Infrared Thermometer

CE RoHS COMPLIANT REACH (SVHC)

ST670/672/675/677 series are new generation of high performance infrared thermometers.



ST685/688/688P/689 Infrared Thermometer

CE RoHS COMPLIANT REACH (SVHC)

ST685/688/688P/689 series are non-contact high performance infrared temperature measuring instruments with high DS ratio, wide temperature range.

Features

- › Rugged and Compact for long distance measurements
- › DS ratio 30:1 / 50:1
- › Temperature range -50~1,000°C (-58~1,832°F)(685/688/689),
-50~1,500°C (-58~2,732°F)(688P)
- › Resolution 0.1°C (0.1°F)

Model name	ST685	ST688	ST688P	ST689
Temperature Range	-50~1,000°C (-58~1,832°F)	-50~1,500°C (-58~2,732°F)	-50~1,000°C (-58~1,832°F)	-50~1,000°C (-58~1,832°F)
Accuracy	±3.0°C (±5.4°F) From -50~-20°C (-58~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~1,000°C (212~1,832°F)	±3.0°C (±5.4°F) From -50~-20°C (-58~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~1,500°C (212~2,732°F)	±3.0°C (±5.4°F) From -50~-20°C (-58~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~1,000°C (212~1,832°F)	±3.0°C (±5.4°F) From -50~-20°C (-58~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~1,000°C (212~1,832°F)
Resolution	0.1°C / 0.1°F			
Response Time	500 ms			
Emissivity	Adjustable 0.1 ~ 1.0			
Distance/Spot Ratio	30:1	50:1		
Dimensions	200x156x48mm (7.9"x6.14"x1.89")			
Weight	330g (11.64 oz.)			
Accessories	9V Battery, Instruction manual, Box, Carrying case, CD(689), K type thermocouple (689)			



Features

- › Rugged and Ergonomic Design
- › DS Ratio 30:1 / 50:1
- › Temperature range -32~760°C (-25.6~1,400°F)(670),
-32~1,300°C (-25.6~2,372°F)(672/675),
-32~1,650°C (-25.6~3,002°F)(677)
- › Resolution 0.1°C (0.1°F)

Model name	ST670	ST672	ST675	ST677
Temperature Range	-32~760°C (-25.6~1,400°F)	-32~1,300°C (-25.6~2,372°F)	-32~1,650°C (-25.6~3,002°F)	-32~1,650°C (-25.6~3,002°F)
Accuracy	±3.0°C (±5.4°F) From -32~-20°C (-25.6~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~760°C (212~1,400°F)	±3.0°C (±5.4°F) From -32~-20°C (-25.6~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~1,300°C (212~2,372°F)	±3.0°C (±5.4°F) From -32~-20°C (-25.6~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~1,650°C (212~3,002°F)	±3.0°C (±5.4°F) From -32~-20°C (-25.6~-4°F), ±2.0°C (±3.6°F) From -20~100°C (-4~212°F), ±2% From 100~1,650°C (212~3,002°F)
Resolution	0.1°C or 0.1°F	0.1°C or 0.1°F (Above 2,000°F: 1°F)		
Response Time	500 ms			
Emissivity	Adjustable 0.1 ~ 1.0			
Distance/Spot Ratio	30:1	50:1		
Dimensions	200x166x51mm (7.87"x6.53"x2.00")			
Weight	280g (9.88 oz.)			
Accessories	9V Battery, Instruction manual, Box, Carrying case			

Comparison Table

Model Name	ST630	ST632	ST633	ST640	ST642	ST643	ST650	ST652	ST653	ST656	ST658
Thermopile (μm)	5~14	5~14	5~14	5~14	5~14	5~14	5~14	5~14	5~14	8~14	8~14
Lens*	F	F	F	F	F	F	F	F	F	F	F
Auto Power Off (sec.)	6	6	6	6	6	6	6	6	6	6	6
C/F Switchable	●	●	●	●	●	●	●	●	●	●	●
Backlight	●	●	●	●	●	●	●	●	●	●	●
Laser Sight Switchable	●	●	●	●	●	●	●	●	●	●	●
Max/Min/Avg.	○	○	●	●	●	●	○	●	●	○	●
10 Point Memory	○	○	●	○	○	●	○	●	●	○	●
Audio Alarm	○	○	●	●	●	●	○	●	●	○	●
Color Identify System	○	○	○	●	●	●	○	○	○	○	○
Auto Measuring	○	○	○	●	●	●	○	●	●	○	●
Thermocouple (K-Type)	○	○	○	○	●	●	○	○	○	○	○
Emissivity Smart	○	○	○	○	●	●	○	○	○	○	○
Data Output (USB)	○	○	○	○	○	○	○	○	○	○	○
Dual Display	○	○	●	●	●	●	○	○	○	○	○
Tripod Mount	○	○	○	●	●	●	○	○	○	○	○

Model Name	ST660	ST662	ST663	ST670	ST672	ST675	ST677	ST685	ST688	ST688P	ST689
Thermopile (μm)	8~14	8~14	8~14	8~14	8~14	8~14	8~14	8~14	8~14	8~14	8~14
Lens*	F	F	F	Ge	Ge	Ge	Ge	Ge	Ge	Ge	Ge
Auto Power Off (sec.)	6	6	6	6	6	6	6	6	6	6	30
C/F Switchable	●	●	●	●	●	●	●	●	●	●	●
Backlight	●	●	●	●	●	●	●	●	●	●	●
Laser Sight Switchable	●	●	●	●	●	●	●	●	●	●	●
Max/Min/Avg.	○	●	●	●	●	●	●	●	●	●	●
10 Point Memory	○	●	●	●	●	●	●	●	●	●	●
Audio Alarm	○	●	●	●	●	●	●	●	●	●	●
Color Identify System	○	○	○	○	○	○	○	○	○	○	○
Auto Measuring	○	●	●	●	●	●	●	●	●	●	●
Thermocouple (K-Type)	○	○	○	○	○	○	○	○	○	○	●
Emissivity Smart	○	○	○	○	○	○	○	○	○	○	○
Data Output (USB)	○	○	○	○	○	○	○	○	○	○	●
Dual Display	○	○	○	●	●	●	●	●	●	●	●
Tripod Mount	○	○	○	●	●	●	●	●	●	●	●

* F : Fresnel ; Ge : Germanium

SENTRY®
SENTRY OPTRONICS CORP.

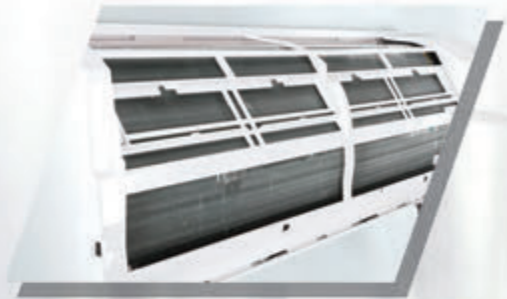


GAS Detector

ST310/312 Refrigerant Leak Detector



ST310/312 series are the refrigerant leak detector with an extremely sensitive semiconductor sensor and front illumination by a LED tip light.



LED Tip light



LED Tip light

Features

- › LED Tip light.
- › Mute function.
- › Low battery indicator.
- › Rugged flexible probe.
- › 3 adjustable sensitivity levels.
- › Detects R-134a, R-410a, R-407c and R-22 etc.
- › Sensor failure indicator (312).
- › Start-up melody (312).
- › USB power adapter (312).
- › DC 3.7v rechargeable lithium battery (312).
- › Automatic adjustment and reset to background (312).

Model name	ST310	ST312
Refrigerants	R-22, R-134a, R-404a, R-410a, and all CFCs, HCFCs and HFCs	
Sensitivity Levels	High 7 g / year (0.25 oz. / year) Medium 14 g / year (0.5 oz. / year) Low 28 g / year (0.99 oz. / year)	High 4 g / year (0.15 oz. / year) Medium 7 g / year (0.25 oz. / year) Low 14 g / year (0.50 oz. / year) (Compatibility with SAE J2791)
Response Time	N/A	Less than 0.5 second
Warm Up Time	90 seconds	45 seconds
Battery	9V Battery	DC 3.7V, 800mAh rechargeable lithium battery. Approx. 2.5 hours continuous use when fully charged.
Charging Time	N/A	3 hours in all @ 400mA
Fan System	N/A	Yes
Flexible Probe Length	450mm (17.72")	
Dimensions	184x70x40mm (7.24"x2.76"x1.57")	
Weight	280g (9.88 oz.)	300g (10.58 oz.)
Accessories	9V Battery (310), Instruction manual, Leak test bottle, AC adapter (312), Holster (312), Carrying case, Sleeve	

ST316 Infrared Refrigerant Leak Detector



ST316 is the refrigerant leak detector with an extremely sensitive infrared sensor and front illumination by a LED tip light. It provides 3 adjustable sensitivity levels and especially contamination mode for smallest leak. The Multiple colors LED are easily for users to identify the leak levels.



LED Tip light

Features

- › Extremely sensitive infrared sensor.
- › Contamination mode (Smallest leak detection mode).
- › Peak hold function.
- › Auto sensitivity function.
- › Audio alarm (Buzzer).
- › Unstable environment indication.
- › LED tip light.
- › Mute function.
- › Low battery indicator.
- › USB power adapter.
- › Rugged flexible probe.
- › 3 adjustable sensitivity levels.
- › DC 3.7V rechargeable lithium battery.
- › Automatic reset to background.
- › Detects R-134a, R-410a, R-407c and R-22 etc.



Model name	ST316
Refrigerants	R-22, R-134a, R-404a, R-410a, R-507 (AZ-50) and all CFCs, HCFCs and HFCs
Sensitivity Levels	High 4 g / year (0.15 oz. / year) Medium 7 g / year (0.25 oz. / year) Low 14 g / year (0.5 oz. / year) (Compatible with SAE J2791)
Response Time	Less than 1 second
Warm Up time	30 seconds
Battery	DC 3.7V, 1960mAh rechargeable lithium battery. Approx. 5 hours continuous use when fully charged.
Charging Time	6 hours in all @ 400mA, 0~45°C (32~113°F)
Storage Temperature	-10~60°C (14~140°F), <70%RH
Pump System	Yes
Flexible probe length	450mm (17.72")
Dimensions	184x70x40mm (7.24"x2.76"x1.57")
Weight	435g (15.34 oz.)
Accessories	Instruction manual, AC adapter, Leak test bottle, Holster, Porex Filter (2pcs), Carrying case, Sleeve



Environmental



ST730 / 732 / 733 series are the IRthermo-anemometer with a highly sensitive hot-wire and also built-in a non-contact infrared thermometer. ST730S is a professional Anemometer with a highly sensitive hot-wire and built-in temperature compensation.



Function Table				
Model name	ST730S	ST730	ST732	ST733
Data Logging (2000 points)	○	○	●	●
Time Interval	○	○	●	●
PC Interface (USB)	○	○	●	●
AC Power	●	●	●	●
Max / Min / Avg	●	●	●	●

Model name	ST730S	ST730	ST732	ST733
Measurement	Air Velocity : m/s, ft/min, km/h, mile/h, knots Temperature : °C and °F		Air Velocity : m/s, ft/min, km/h, mile/h, knots Air Flow : CMM (m³/min), CFM (ft³/min) Temperature : °C and °F	
Air Velocity Range	0~40m/s, 0~7,874ft/min, 0~144km/h, 0~89.5mile/h, 0~77.75 knots Air Temperature : 0~70°C (32~158°F)			
Air Velocity Resolution	0.01 m/s, 0.1 ft/min, 0.01 km/h, 0.01 mile/h, 0.01 knots Air Temperature : 0.1°C (0.1°F)			
Air Velocity Accuracy	±(0.03+3%) m/s, ± (5.9+3%) ft/min, ± (0.11+3%) km/h, ± (0.07+3%) mile/h, ± (0.06+3%) knots Air Temperature : ± 0.8°C (1.5°F)			
Infrared Thermometer Range	N/A	-32.0~537.5°C (-25.6~999.5°F)		
Infrared Thermometer Accuracy	N/A	-32.0~-20°C (-25.6 ~ -4°F) : ±3°C (±5.4°F), -20.0~100.0°C (-4 ~ 212°F) : ±2°C (±3.6°F), 100 ~ 537.5°C (212~999.5°F) : ±2%		
Infrared Thermometer Resolution	N/A	0.1°C / 0.1°F		
Distance / Spot Ratio	N/A	8 : 1		30 : 1
Emissivity	N/A	0.95 fixed		Adjustable 0.1~1.0
Sample Time	Approx. 0.5 sec.			
Dimensions	184x70x40mm (7.24"x2.75"x1.57") Telescope probe : approx. 1,800mm (70.8") include wire rod.			
Weight	Approx. 317g (11.2 oz.)	Approx. 320g (11.3 oz.)	Approx. 310g (10.9 oz.)	
Accessories	9V Battery, Instruction manual, AC Adapter, (ST732&ST733 Include USB cable, PC Interface window-base software), Carrying case, Sleeve			

Features

- > Simultaneous display of air velocity plus ambient temperatures.
- > Combination of hot wire and standard thermistor, deliver rapid and precise measurements event at low air velocity.
- > Wide range measurement of air velocity.
- > Multi-functions for measurement : m/s, km/h, ft/min, knots, mile/h. CMM(732/733), CFM(733).
- > Infrared thermometer measures remote surface temperature to 537°C (999.5°F) with 8:1 (730/732) / 30:1(733) distance to spot ratio.
- > Auto power off after 10 minutes of idle (30 Minutes with AC Power).

ST510/512/513 UV Lightmeter



ST510/512/513 series are the ultraviolet meters for UVA/UVC/UVAB intensity measurement. It provides a wide range intensity measuring up to 40 mW/cm². It provides a back magnetic mount for users to fix and install the meters easily.



Features

- > High and Low measurements range in a unit mW/cm² or μW/cm².
- > Backlit LCD and 4 Digits dual display.
- > 20 points memory.
- > Automatic measuring.
- > Socket of tripod mounting.
- > Magnetic mount.

Model name	ST510	ST512	ST513
Sensor Designation	UVA	UVC	UVAB
Spectrum Range	320~380nm	220~275nm	290nm~370nm
Calibration Point	365nm	254nm	365nm
Accuracy (23±5°C/73.4±9°F)	±4% ±1 digit		
Illumination Range	1 μW/cm ² ~ 40.00mW/cm ²		
Weight	Approx. 90g (3.17 oz.) without battery and detector Approx. 201.6g (7.11 oz.) without battery		
Dimensions	140x49x29mm (5.51"x1.93"x1.14")		
Accessories	9V Battery, UV Sensor probe, Instruction manual, Carrying case, Sleeve		

ST520/520S/522 Chroma Lightmeter



ST520 is a chroma meter with precision measurement of luminance and color temperature for broad light sources. ST520S is a chroma meter with precision measurement of luminance and color temperature for LED light sources. ST522 is a chroma meter with precision measurement of luminance and color temperature for multiple light sources with selection function. Each of them meets CIE (International Commission on Illumination) photopic spectral response and the color temperature.

ST520S is a chroma meter with precision measurement of luminance and color temperature for LED light sources. ST522 is a chroma meter with precision measurement of luminance and color temperature for multiple light sources with selection function. Each of them meets CIE (International Commission on Illumination) photopic spectral response and the color temperature.



Features

- > Precision instrument for light luminance and color coordinate.
- > Meet CIE (International Commission on Illumination) photopic spectral response.
- > Color temperature or Correlated color temperature.
- > Custom reference value of color difference mode.
- > Lux or foot-candle unit selection.
- > Magnetic mount.

Model name	ST520	ST520S	ST522
Light Source	General Source	LED Source	Source Selectable
Measuring Function	Illuminance : Ev (lx or fcd) Color Coordinate : (x, y), (u', v') (CIE 1960) Correlated Color Temperature : CT, Δuv Color Difference : (ΔEv, Δx, Δy), (ΔEv, Δu', Δv'), (ΔEv, Δu'v'), (One set of reference color)	Illuminance : Ev (lx or fcd) Color Coordinate : (x, y), (u', v') (CIE 1960) Correlated Color Temperature : CT, Δuv Color Difference : (ΔEv, Δx, Δy), (ΔEv, Δu', Δv'), (ΔEv, ΔCT, Δu'v') (One set of reference color)	
Measuring Range	Ev : 0~80,000 lx (0~7,432 fcd) CT : 99,990 K Max.		
Accuracy (at 25°C/77°F, 60% RH)	Ev : ± 5% (3,000 lx, standard illuminant A measured) x, y : ± 0.02 (100 lx, RGB LED Light)		Ev : ± (3%+2 Digital) (3,000 lx, standard illuminant A measured) x, y : ± 0.02 (100 lx, RGB LED Light) CT : ± 4 %
Resolution	Ev : 1 (0~9,999), 10 (Over 10,000), lx ; 0.1 (0.0~999.9), 1 (Over 1,000), fcd ; CT : 1 (0~9,999), 10 (Over 10,000), K ; x, y : 0.001 ; u', v' : 0.001		
Response Time	Approx. 1 sec.		
Temperature Drift	Ev : ± (5%+2 Digital) (3,000 lx, standard illuminant A measured) x, y : ± 0.008 (100 lx, RGB LED Light)		
Humidity Drift	Ev : ± (3%+2 Digital) (3,000 lx, standard illuminant A measured) x, y : ± 0.005 (100 lx, RGB LED Light)		
Operation Temperature	0°C to 50°C (32°F to 122°F), Less than 80% RH		
Store Temperature	-10°C to 60°C (14°F to 140°F), Less than 85% RH		
Weight	179g (6.3 oz.) without battery		
Dimensions	Main Instrument : 140x49x29 mm (5.5"x1.9"x1.1") Sensor Probe : 165x50x36mm (6.5"x2.0"x1.4")		
Accessories	9V Battery, Instruction manual, Carrying case, Sleeve		

ST530 Solar Power Meter



ST530 is designed to measure solar power in the range from 400 to 1100 nanometers. The power of solar spectral range, orientation and angular detection of the meter allow users to conduct the most precise quantitative measurements of solar power radiation.



Features

- > Solar power measurement with Orientation and Tilt angle.
- > 4 digits and auto range measurement.
- > W/m² or BTU/ft² · h unit selection.
- > 20 points memory, auto record and data recall.
- > Auto transmission measurements.
- > Automatic backlight LCD and triple reading display.

Model name	ST530
Range	0~2,000 W/m ² (0~634 BTU/ft ² · h)
Accuracy (at 23°C, 60% RH)	±10W/m ² (±3 BTU/ft ² · h) or ±5% whichever is greater
Resolution	0.00~99.99 W/m ² : 0.01 W/m ² 100.0~999.9 W/m ² : 0.1 W/m ² 1000~2,000 W/m ² : 1 W/m ² 0.00~99.99 BTU/ft ² · h : 0.01 BTU/ft ² · h 100.0~634.0 BTU/ft ² · h : 0.1 BTU/ft ² · h
Angular Accuracy	Cosine corrected < 7% (angle < 60°)
Tilt Angle Range	0°~90°
Tilt Angle Accuracy (at 23°C, 60% RH)	±1.2° (≤60°), Additional temperature induced error ± 0.1°/°C from 23°C
Sample Time	Approx. 0.4 second
Compass	Yes
Weight	202g (7.1 oz.) without battery
Dimensions	Main Instrument : 140x49x29mm (5.5"x1.9"x1.1") Sensor Probe : 83x54x26mm (3.3"x2.1"x1.0")
Accessories	9V battery, Instruction manual, Carrying case, Sleeve

LD1 Lightning Detector



LD1 is a lightning detector to detect lightning strikes and analyze the storm direction while you are going on an outdoor activity or recreation. It gives alarm while lightning strike happens and indicates the distance of storm with LED signs. LD1 tells you if a storm is approaching or departing.

Features

- > Displays lightning strike distance, storm direction and battery life.
- > Number of alarm beeps depends on the proximity of lightning.
- > Senses lightning up to 40 miles (64km) away.
- > Personal and portable unit that can be worn hanged to your belt.
- > Loud audible alarms & LEDs lights to alert the strike distances.
- > Vibration to remind strike approaching.

Model name	LD1
Rang	0 ~ 10, 10 ~ 19, 19 ~ 39, 39 ~ 64 km (0 ~ 6, 6 ~ 12, 12 ~ 24, 24 ~ 40 miles)
Accuracy	state-of-the-art electronics and full digital microprocessor insures accuracy and reliability
Funtions button (All in one)	Detecting lighting strikes, Storm direction, Indicate direction, Battery check
Weight	74g (2.6 oz.)
Dimensions	84x55x24mm (3.31"x2.17"x0.96")
Accessories	1.5V battery (2pcs), Instruction manual



SENTRY®

SENTRY OPTRONICS CORP.



Test Equipment

ST810 Brix Meter



ST810 is a digital brix meter with highly optical precision measurement of refractive index to conduct the Brix value of aqueous solutions. Simple and efficient measurement with a protective cover for the users easily measure the Brix concentration from 0.0 ~ 53.0%



Model name	ST810
Measuring Sources	Brix Temperature: °C/°F Refractive index(RI)
Measuring Range (Brix) (Water at 4 ~ 60°C / 39.2~140°F)	0.0~53.0% (10~40°C / 50~104°F Automatic Temperature Compensation)
Measuring Range (RI) (Water at 4 ~ 60°C / 39.2~140°F)	1.3301~1.4374
Temperature	4.0~60.0°C (39.0~140.0°F)
Accuracy	Temperature±1°C/°F, Brix ±0.2%, RI ±0.0003
Resolution	Brix 0.1% Temperature 0.1°C / °F, Refractive index 0.0001
Response time	3 Seconds
International Protection class	IP65 Water Resistant
Dimensions	113*60*38 mm (4.4"x2.4"x1.5")
Weight	120 g (4.23oz.) without battery
Accessories	AAA Battery x2, Instruction manual, Pouch, Box

Features

- > Wide measurement range (Brix 0~53%).
- > Sugar content (Brix%) is digitally displayed.
- > Refractive index measurement.
- > High resolution (Brix 0.1%).
- > Ambient temperature compensation..
- > Reliable water resistant (IP65).
- > Automatic measurement function (Closed prism cover).
- > Automatic memory function.
- > Abrasion and corrosion-resistant coating (Sapphire Coating).



ST816 Salinity Meter



ST816 is a digital salt meter with highly optical precision measurement of refractive index to conduct the salt value. Simple and efficient measurement with a protective cover for the users easily measure the salt concentration from 0.0 to 28.0% (g/100g).



Model name	ST816
Measuring Sources	Sodium chloride Temperature: °C/°F Refractive index (RI)
Measuring Range (Sodium chloride) (Water at 4 ~ 60°C / 39.2~140°F)	0.0~28.0% (10~40°C/50~104°F Automatic Temperature Compensation)
Measuring Range (RI) (Water at 4 ~ 60°C / 39.2~140°F)	1.3301~1.4098
Temperature	4.0~60.0°C (39.0~140.0°F)
Accuracy	Temperature±1°C/°F, Sodium chloride ±0.2%, RI ±0.0003
Resolution	Sodium chloride 0.1% Temperature 0.1°C / °F, Refractive index 0.0001
Response time	3 Seconds
International Protection class	IP65 Water Resistant
Dimensions	113x60x38mm (4.4"x2.4"x1.5")
Weight	120g (4.23oz.) without battery
Accessories	AAA Battery x2, Instruction manual, Pouch, Box

Features

- > Wide measurement range (Sodium chloride 0~28%).
- > Sodium chloride content (NaCl%) is digitally displayed.
- > Refractive index measurement.
- > High resolution (NaCl 0.1%).
- > Ambient temperature compensation..
- > Reliable water resistant (IP65).
- > Automatic measurement function (Closed prism cover).
- > Automatic memory function.
- > Abrasion and corrosion-resistant coating (Sapphire Coating).



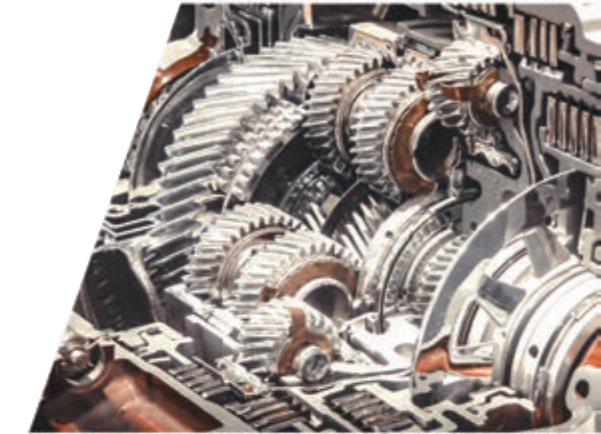
ST722 / 723 Tachometer



ST722/723 series are the digital tachometers with contact and non-contact RPM (revolutions per minute) measuring. To measure RPM, it has 5 digits LCD, scan/hold/auto function and auto power off (30 seconds). It has 40 reading memories including 10 selectable MAX measurements, 10 selectable MIN measurements, 10 selectable AVG measurements and 10 selectable DATA memory.

Features

- > Non-Contact and Contact mode.
- > Non-contact measurement up to 40 inches/100cm away from target.
- > Laser sighting.
- > Auto Ranging/Fixed Decimal.
- > Tripod Mounting Bushing.
- > 40 reading memories.



Model Name	ST722	ST723
Rotation Speed (non-contact)	6.0 ~ 99,999 RPM (rev/min)	6.0 ~ 99,999 RPM (rev/min)
Rotation Speed (contact)	N/A	6.0 ~ 25,000 rpm (rev/min)
Revolution Count	N/A	1~99,999 rev
Range of Surface Speed	N/A	0.6 ~ 2,500.0 M/M (m/min) 0.7 ~ 2,734.0 Y/M (yard/min) 23.6 ~ 98,425 I/M (inch/min) 2.0 ~ 8,202.1 F/M (feet/min)
Length(contact)	N/A	0.1 ~ 9,999.9 M (m) 0.1 ~ 10,936 YD (yard) 0.3 ~ 32,808 FT (feet)
Accuracy	6.0 ~ 5,999.9 RPM : ±0.01% and ±1 digit 6,000.0 ~ 99,999 RPM : ±0.05% and ±1 digit	6.0 ~ 5,999.9 RPM : ±0.01% and ±1 digit 6,000.0 ~ 99,999 RPM : ±0.05% and ±1 digit Surface speed, Length : ±0.5% and ±1 digit
Detection	Laser Diode	
Resolution	6.0 ~ 9,999.9 RPM : 0.1RPM 10,000 ~ 99,999 RPM : 1RPM	
Memory	40 Points	
Dimensions	147x49x29 mm (5.79"x1.93"x1.14")	182x49x29 mm (7.17"x1.93"x1.14") Include contact adapters.
Weight	95 g (3.35 oz.) without battery	95 g (3.35 oz.) without battery, Contact adapter : 50 g (1.76 oz.)
Accessories	9V battery, Instruction manual, Cone adapter (723), Funnel adapter (723), Contact adapter (723), Master Wheel (10cm) (723), Re ective tape 15x525mm (0.59" x 20.67"), Carrying case, Box	

ST550 Electrostatic Fieldmeter

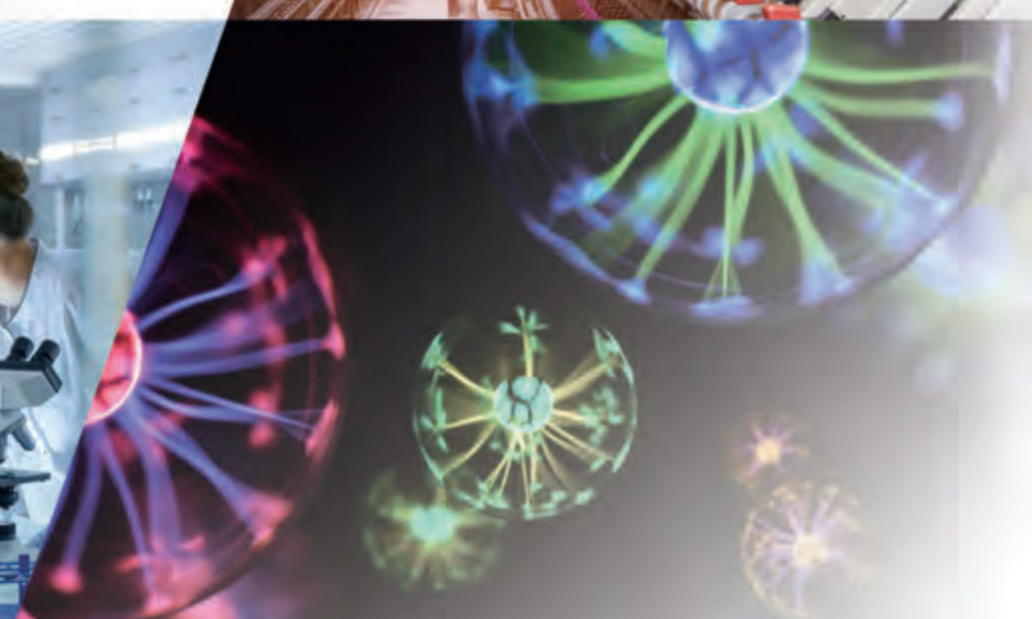


ST550 is an electrostatic fieldmeter with highly precision measurement of electric field to ± 20 kV. It is easy to use for locating and measuring static charges with lightweight, compact design.

Features

- > High precision and LCD display.
- > Accurate positioning by dual LED.
- > Zero adjust and Auto power off function.
- > Optional accessories with ground wire.
- > Average, Maximum, and Minimum Mode.

Model name	ST550
Measuring Range	Low MODE : $\pm 1,999$ V Hi MODE : ± 20 KV
Resolution	Low MODE : 1V Hi MODE : 10V
Accuracy	10%
Measuring distance	25mm (0.1")
Operation humidity	0~85% (RH)
Response time	500ms
Dimensions	120x49x29mm (4.7"x2.0"x1.2")
Distance mark	Two LED guide lights
Ground Wire	Yes
Weight	152.4g(5.38 oz.)with battery
Accessories	9V Battery, Instruction manual, Ground wire, Carrying case, Box



Temperature



GAS Detector



Environmental



Test Equipment

