

SR-1000 Series









HIGH RESOLUTION READING NOW POSSIBLE



## **SETTING THE NEW STANDARD** FOR CODE READING

SR-1000 Series















# 3 CHALLENGES CODE READERS FACE

# READER CANNOT BE MOUNTED AT DESIRED DISTANCE

"Selecting the right reader and lens combination for the distance is frustrating."

"The system has to be designed to fit the specifications of the reader."

#### **OPTIMAL SETTINGS ARE UNKNOWN**

\*Reading was successful during setup but there are many errors during actual operation."

"Setup requires a whole day."

#### **READING FAILS DUE TO GLARE**

"Do we need to mount the reader at a certain angle? What is the best angle?"

"Is external lighting required? What kind?"

# ANSWER **JUST PRESS THE BUTTON**



#### PRESS THE BUTTON

#### **AUTOFOCUS**

The reader can be mounted at any distance and maintain a clear image. (1000 mm max.)

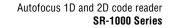
#### **AUTOMATIC TUNING**

Determines optimal settings for exposure time, image processing filter, etc. [About 750000 combinations]

#### **AUTOMATIC POLARIZATION**

Glare can be eliminated. Reader angle adjustment or external lighting is unnecessary.







#### **WORLD'S FIRST AUTOMATIC POLARIZATION CONTROL**

The reader features both polarized and direct light sources. Automatic polarizing filter selection eliminates glare and allows flexible mounting.











#### 1 JUST PRESS THE BUTTON

#### **AUTOFOCUS**

#### **ONE READER FOR MANY APPLICATIONS**

Mounting is less restricted by performance or specifications of the code reader itself, thus improving flexibility in machine designs for production lines and jigs. With autofocus capabilities, a single reader can detect codes on targets of varying heights.



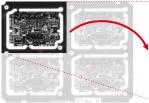
Securing a robot's movement range

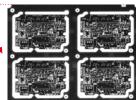
Reading extremely small codes

#### **FIELD OF VIEW 4× LARGER**

Conventional field of view













Distance: 110 mm 4.33"

Range:

290 mm × 220 mm

11.42" × 8.66"



**EVEN IF THE POSITION** 

**CHANGES** 

Distance: 1000 mm 39.37"



EVEN IF THE DISTANCE IS



FAR



#### AUTOMATIC TUNING

#### OPTIMAL SETTING OF EXPOSURE TIME, FILTERS AND MORE

The code reader automatically optimizes the exposure time, image processing filter and other parameters according to the target and mounting distance.

#### CLEAR IMAGE CAPTURE

#### **CORRECTION ITEMS AND EXAMPLES OF AFFECTED CODES**



#### **CAPTURE BRIGHTNESS CORRECTION**

Automatically configures various combinations of exposure time, dynamic range and gain in order to achieve the optimal brightness.





Ŧ

#### CONTRAST THRESHOLD CORRECTION

Automatically corrects black/white thresholds and optimizes the contrast between code and background.





Low contras

#### FILTER CORRECTION

Automatically selects the best filter and filtering intensity to correct the captured image.



Bleeding



Thick printing

Thin printing

**GEOMETRIC CORRECTION** 

Corrects distorted codes, such as those on cylinders and other round surfaces or when the reader is mounted at an angle.



Parallel distortion



Distortion

/W/#

**IMAGE REDUCTION & CORRECTION** 

Reducing the image size may reduce background noise or missing spaces relatively smaller.



Primary noise



Dot printing

Tranezoidal distortion

#### **APPLICATIONS**

#### Automotive and metal works industries

#### CRANKSHAFTS

NSPECTIONS

The large field of view and autofocus function compensate for changes in both the position and reading distance of codes between product types.



#### **Electronic devices industry**

#### **LEAD FRAMES**

BONDIN

both extremely small codes and codes discolored by heat or oxidation.



#### Food, medical, and packaging industries

#### FOOD PACKAGING

VARIETY INSPECTIONS

Reads codes over a large field of view and at high speeds, even as position and orientation of codes vary.



#### **CAMSHAFTS**

PROCESSIN

Automatically eliminates glare caused by cylindrical and metallic materials to stabilize reading.



#### IC CHIPS

INSPECTION

Simultaneously reads multiple codes in a tray of ICs for identification



#### MEDICINAL PACKAGING

PACKAGING

Reliably captures barcodes and 2D codes traveling at high speeds to help contribute to ever-increasing safety checks.

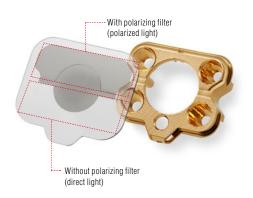


#### **AUTOMATIC** POLARIZATION CONTROL

#### **ENSURING FLEXIBLE MOUNTING**

Automatic polarization control function World's First

The code reader automatically eliminates glare, thus eliminating the need for mounting angle adjustment or external lighting during installation. When combined with the autofocus function, mounting becomes highly flexible.



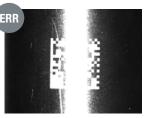
#### **BLACK RESIN**

**CYLINDER** 



Without polarizing filter

With polarizing filter







**METAL** 

HAIRLINE



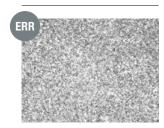




#### METAL

DPM ON **CAST SURFACE** 





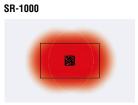
#### **NEW OPTICAL DESIGN FOR STABLE READING**

#### CPC (Compound Parabolic Concentrator) Illumination

A specially shaped reflector has been designed to create high efficiency illumination by reducing loss in light intensity from the high intensity LEDs. Gold plating maximizes the reflectance to achieve brightness exceeding conventional levels by 400%. This provides reading under bright, uniform illumination even at long ranges.

#### Conventional model





Light is concentrated efficiently within the field of view to provide high intensity illumination.



#### UNAFFECTED BY CHANGING CONDITIONS

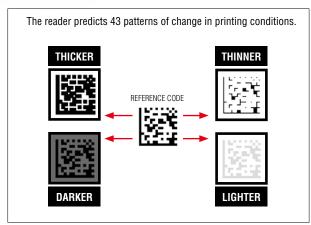
SMART MODE NEW

# FOR CONSISTENT READING REGARDLESS OF CODE CONDITIONS



LIGHTER CODE

Fluctuations in code conditions are predicted during tuning and expanded reading settings are automatically generated. This ensures stable reading even when the contrast of the code changes, eliminating the need to reconfigure the code reader.



#### DETECTING CHANGES IN CODE CONDITIONS

CUSTOM MODE

#### FOR CODE QUALITY MANAGEMENT

The SR-1000 has the functionality to make judgments on code quality. Because code quality degradation can be detected before reading errors occur, this mode can be used for predictive maintenance of the printing process.

Matching level judgment function

Provides code quality comparison

Two codes, which both have a reading rate of 100%, can still be distinguished by the matching level  $\,$ 



Reading rate 100%

Matching level **75** 



Reading rate 100%

Matching level 43

Code verification function

Verification based on code quality standards

OUTPUT DATA AD-ERMT-55841(B)

#### TOTAL GRADE JUDGMENT

Judgment can also be given for each parameter

\*This function is designed for 2D codes (QR, DataMatrix, GS1 Composite, PDF417).



SUPPORTED STANDARDS

- ISO/IEC 15415
- ISO/IEC TR 29158
- (AIM DPM-1-2006) • ISO/IEC 16022
- SAE AS9132
- SEMI T10-0701

7

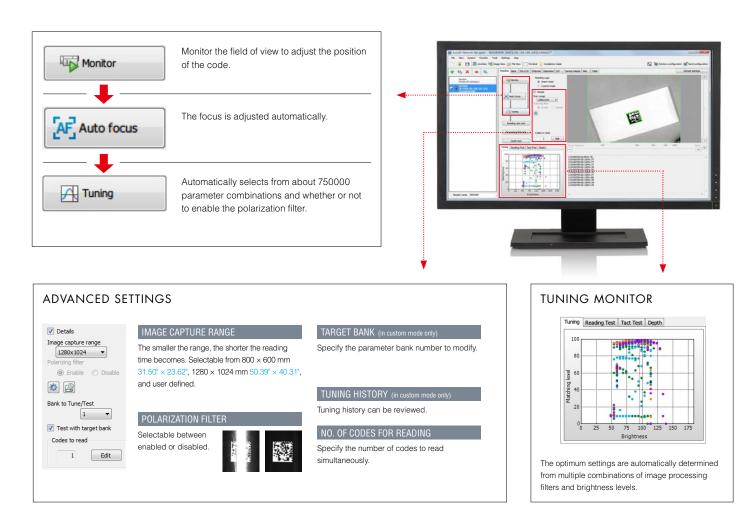
#### FASY-TO-USE HIGH PERFORMANCE

#### **ADVANCED SETUP SOFTWARE**

#### AUTOID NETWORK NAVIGATOR SR-H5W NEW



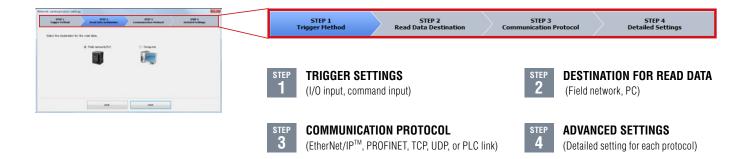
The software provides not only easy code reader setup but also functionality to reduce man-hours for preliminary tests. It is possible to connect to the software through USB.



#### ETHERNET COMMUNICATION WIZARD NEW

Setup can be completed in just four steps with a question-answer form including visual explanations. In previous versions, the user needed to understand the settings available on the screen and determine which items required input.

The new version uses a setup wizard to eliminate the need for item extraction, reducing man-hours for communication setup.

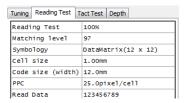


#### SOPHISTICATED MEASUREMENT MODES

The SR-1000 Series provides pre-verification prior to line operation based on tuning results as well as measurement of allowable line speed for reading codes at high speeds.

#### READING RATE MEASUREMENT

The reading success rate can be measured without conducting reading tests on multiple targets with the actual production line or equipment.



#### READING TACT MEASUREMENT

The reading cycle time (tact) can be determined without conducting reading tests on multiple targets with the actual production line or equipment.

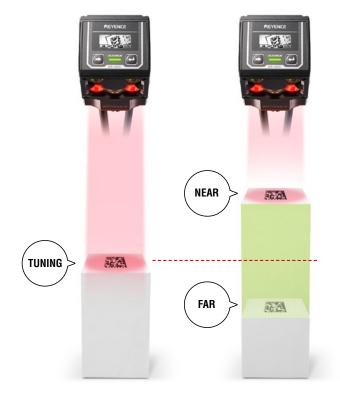
| Tuning Readi | ing Test Tact Test Depth |
|--------------|--------------------------|
| Read time    | 32ms                     |
| Max time     | 33ms                     |
| Min time     | 32ms                     |
| Read Data    | 123456789                |

#### READING DEPTH MEASUREMENT NEW

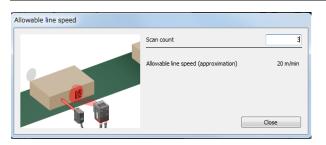
The depth of field can be determined from the mounting distance and the code used for tuning, without conducting reading tests on targets with the actual production line or equipment.

(When the mounting distance changes, perform re-tuning to enable reading again.)





#### LINE SPEED MEASUREMENT NEW



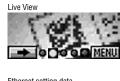
You can check allowable line speed before installation. This helps reduce man-hours spent adjusting production line designs or jigs.

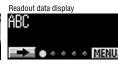
#### FIRST-IN-ITS-CLASS, BUILT-IN ORGANIC LED (OLED) DISPLAY

#### CHECK OPERATION ON-SITE WITHOUT A PC

There is no need for a personal computer or monitor in the facility. The code position adjustment and operating condition can be checked simply with the intuitive built-in display.















#### EASY SETUP WITHOUT A PC

You can set the optimal reading parameters after adjusting the code position by simply pressing the ENTER button to complete fully automatic tuning.





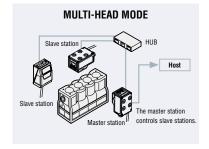
Reading test starts automatically.

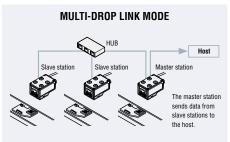
#### HIGHLY-ADVANCED FUNCTIONS OFFER SIMPLE OPERATION

#### MASTER/SLAVE FUNCTION FOR USING MULTIPLE READERS EFFICIENTLY

The master reader can control up to 31 slave readers when multiple readers are used. (Up to 7 slave readers can be controlled in multi-head mode.) This function drastically reduces the programming load on the host computer/PLC.

\* SR-D100/750 Series units can also be added (in combination with SR-1000 Series units) into this function.

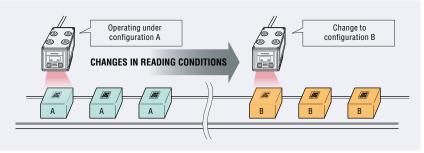




Communication and control via EtherNet/IP™ and PROFINET are also possible. (Only in multi-head mode)

#### PRODUCT CHANGEOVER FUNCTION

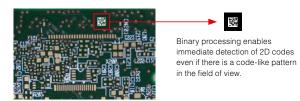
Up to 8 different configuration files can be stored in the reader's ROM. A simple command can switch configurations to allow reading under differing conditions such as reading distance, marking style, and code type.



Switching instructions via EtherNet/IP™ and PROFINET are also possible.

#### HIGH-SPEED SEARCH

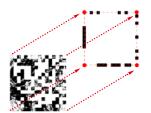
#### 2D CODE SEARCH IN CAPTURED IMAGES



#### ADVANCED IDENTIFICATION

#### DEFECTIVE CODE POSITIONING PROGRAM

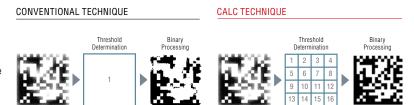
A newly developed defective code positioning program can identify four corners of a 2D code based on a similar code detection pattern, leading to a significant improvement in code detection performance.



#### HIGH-LEVEL DECODING

### CONTRAST ALGORITHM FOR LOCAL CONCENTRATION (CALC)

Our contrast algorithm for local concentrations divides a code into smaller pieces to perform binary processing using thresholds specified for each division. This enables accurate black/white classification without being affected by uneven print density.



<sup>\*</sup> The above illustration is only for reference and does not mean that a code is always divided into 16 parts

#### AUTOMATIC SELECTION OF OPTIMAL READING CONDITIONS (PARAMETER BANK FUNCTION)

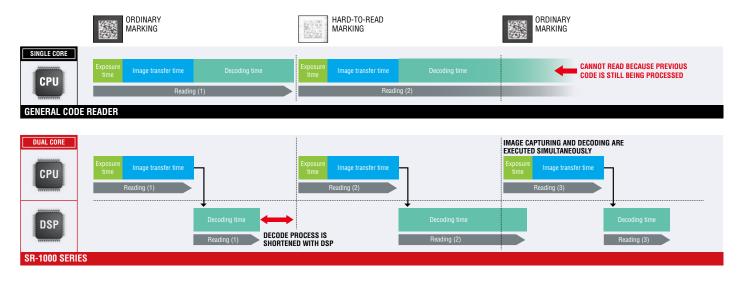
CUSTOM MODE ONLY

The reader will automatically alternate between registered parameter banks until the proper reading conditions are determined.



#### CONTINUOUS HIGH-SPEED READING

#### BUILT-IN DUAL CORE PROCESSOR



#### COMPATIBILITY WITH VARIOUS COMMUNICATION PROTOCOLS

Built-in EtherNet/IPTM, PROFINET, and PLC link protocols make PLC connections even easier. In addition, general-purpose TCP/IP and FTP communications are also supported. With FTP communication, it is possible to transmit not only images but also text files of data.





Connection information for various PLC types can be found here: 

WWW.barcodereader.com/

#### CUSTOMIZABLE DATA OUTPUT FORMATTING

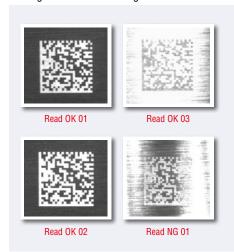
Thanks to customizable data output formats with the Data Edit function, programming corrections on the host side (PC, PLC, etc.) are not required, resulting in shorter setup time.

(EXAMPLES OF DATA EDIT FUNCTION IN USE)

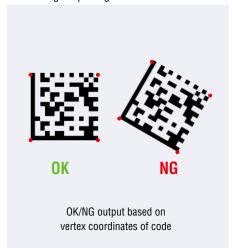
#### Extracting specific characters



#### Adding information to image file names



#### Controlling output signals



#### CONVENIENT SOFTWARE TOOLS

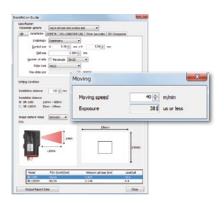
#### 1. Specification and installation check

#### 2. Operational testing and maintenance

#### 3. Simple operations

#### **Installation Guide**

Checks for the proper reading distance, field of view, and line speed based on the code size.



#### **AutoID Terminal**

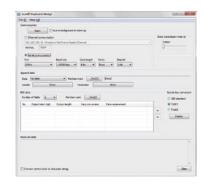
Establishes direct communication with the code reader in order to isolate problems due to communication.



#### **AutoID Keyboard Wedge**

Outputs code data through the PC's keyboard interface.

Both Windows and Mac versions are available.



#### Improved reading of extremely small codes

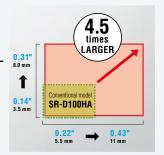
#### HIGH RESOLUTION LENS ATTACHMENT SR-10AH

Capable of reading extremely small codes and codes printed on mirror finished surfaces.

#### Field of View: Increased

4.5×

When compared to conventional models Mounting distance: 40 mm 1.57" Image capture range:  $800 \times 600 \text{ pixels}$ 



# 0.001" 0.025 mm





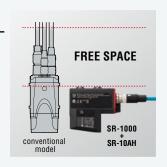
# Variable installation distance for extremely small codes

When KEYENCE's test codes are used Cell size 0.0016" 0.040 mm



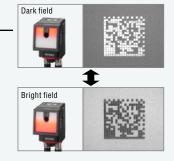
#### **Highly flexible mounting**

When compared to conventional models



#### **Automatic lighting control**

When auto-tuning is enabled, lighting will automatically adjust to optimal settings based on current conditions

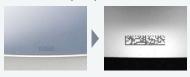


#### APPLICATION EXAMPLES

Micro-size sample (chip LED)



Mirrored surface (wafer)



Metal (IC package)





# Superior reading of codes printed on mirror finished surfaces

#### REFLECTOR ATTACHMENT SR-10AR

By diffusing the reflected light from mirror finished surfaces, it's possible to achieve the same effect as using external lighting to create a clear image.





#### Reduces installation costs and setup time

#### ADJUSTABLE BRACKET OP-88002

This bracket allows the reader to be mounted in any position along either the vertical or horizontal axis.





When SR-10AR is not used



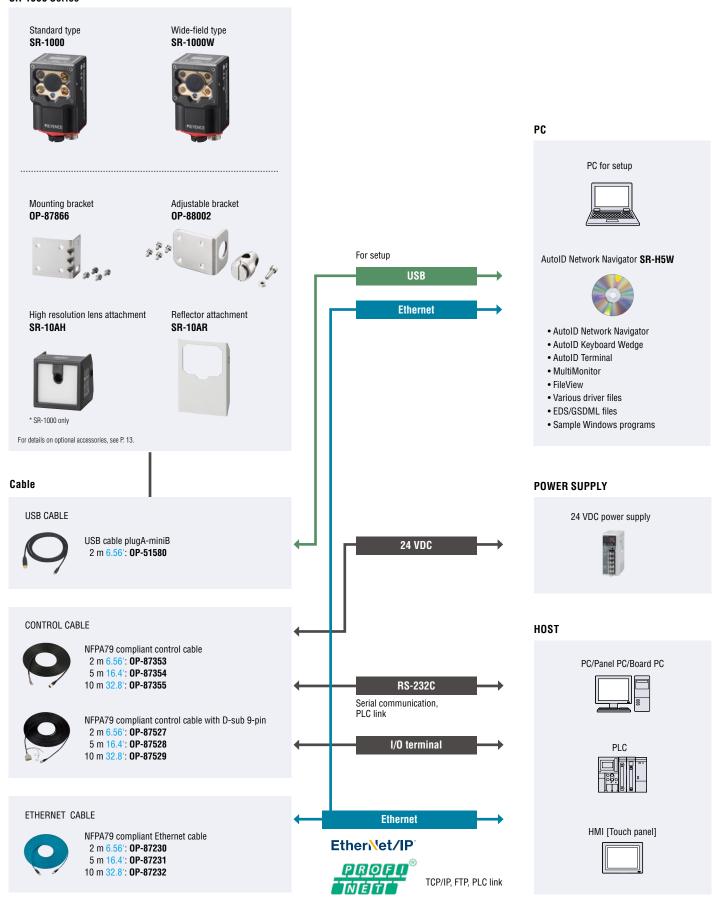


When SR-10AR is used





#### SR-1000 Series



#### SR-1000

#### MINIMUM RESOLUTION

|                            |              | Unit (mm inch) |
|----------------------------|--------------|----------------|
| Distance                   | 2D           | Barcode        |
| 110 4.33"                  | 0.063 0.002" |                |
| 110 to 140 4.33" to 5.51"  | 0.082 0.003" | 0.082 0.003"   |
| 110 to 230 4.33" to 9.06"  | 0.14 0.006"  |                |
| 110 to 300 4.33" to 11.81" | 0.18 0.007"  | 0.11 0.004"    |
| 110 to 400 4.33" to 15.75" | 0.24 0.009"  | 0.15 0.006"    |

0.37 0.015"

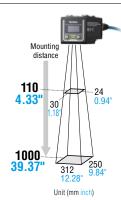
0.61 0.024"

0.22 0.009"

0.37 0.015"

#### FIELD OF VIEW

| FIELD OF VIEV | V   |           |   | Unit (mm inch) |
|---------------|---|-----------|---|----------------|
|               | Image capture range<br>(1280 × 1024 pixels) |           | Image capture range<br>(800 × 600 pixels) |                |
| Distance      | Width                                       | Height    | Width                                     | Height         |
| 110 4.33"     | 30 1.18"                                    | 24 0.94"  | 19 0.75"                                  | 14 0.55"       |
| 140 5.51"     | 40 1.57"                                    | 32 1.26"  | 25 0.98"                                  | 18 0.71"       |
| 230 9.06"     | 68 2.68"                                    | 54 2.13"  | 42 1.65"                                  | 32 1.26"       |
| 300 11.81"    | 90 3.54"                                    | 72 2.83"  | 56 2.20"                                  | 42 1.65"       |
| 400 15.75"    | 122 4.80"                                   | 97 3.82"  | 76 2.99"                                  | 57 2.24"       |
| 600 23.62"    | 185 7.28"                                   | 148 5.83" | 116 4.57"                                 | 87 3.43"       |
| 1000 39.37"   | 312 12.28"                                  | 250 9.84" | 195 7.68"                                 | 146 5.75"      |



#### SR-1000W

#### MINIMUM RESOLUTION

110 to 600 4.33" to 23.62"

110 to 1000 4.33" to 39.37"

| MINIMUM RESULUTION        |              | Unit (mm inch) |
|---------------------------|--------------|----------------|
| Distance                  | 2D           | Barcode        |
| 50 1.97"                  | 0.082 0.003" | 0.082 0.003"   |
| 50 to 100 1.97" to 3.94"  | 0.14 0.006"  | 0.002 0.003    |
| 50 to 150 1.97" to 5.91"  | 0.20 0.008"  | 0.12 0.005"    |
| 50 to 230 1.97" to 9.06"  | 0.30 0.012"  | 0.18 0.007"    |
| 50 to 300 1.97" to 11.81" | 0.38 0.015"  | 0.23 0.009"    |
| 50 to 400 1.97" to 15.75" | 0.51 0.020"  | 0.31 0.012"    |
| 50 to 600 1.97" to 23.62" | 0.76 0.030"  | 0.45 0.018"    |

#### FIELD OF VIEW

| I ILLD OI VILV | V   |                   |   | Unit (mm inch) |
|----------------|---|-------------------|---|----------------|
|                | Image capture range<br>(1280 × 1024 pixels) |                   | Image capture range<br>(800 × 600 pixels) |                |
| Distance       | Width                                       | Height            | Width                                     | Height         |
| 50 1.97"       | 35 1.38"                                    | 28 1.10"          | 22 0.87"                                  | 16 0.63"       |
| 100 3.94"      | 67 2.64"                                    | 54 2.13"          | 42 1.65"                                  | 31 1.22"       |
| 150 5.91"      | 99 3.90"                                    | 79 3.11"          | 62 2.44"                                  | 46 1.81"       |
| 230 9.06"      | 150 5.91"                                   | 120 4.72"         | 93 3.66"                                  | 70 2.76"       |
| 300 11.81"     | 194 7.64"                                   | 155 <b>6.10</b> " | 121 4.76"                                 | 91 3.58"       |
| 400 15.75"     | 257 10.12"                                  | 206 8.11"         | 161 6.34"                                 | 120 4.72"      |
| 600 23.62"     | 384 15.12"                                  | 307 12.09"        | 240 9.45"                                 | 180 7.09"      |

#### Mounting 50 1.97 · 28 1.10" 600 23.62" 384 15.12" Unit (mm inch)

#### SR-1000 + SR-10AH

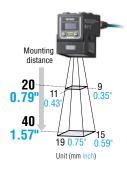
#### MINIMUM RESOLUTION

Unit (mm inch)

| Distance |                         | 2D           | Barcode      |
|----------|-------------------------|--------------|--------------|
|          | 20 0.79"                | 0.025 0.001" |              |
|          | 20 to 30 0.79" to 1.18" | 0.03 0.001"  | 0.082 0.003" |
|          | 20 to 40 0.79" to 1.57" | 0.04 0.002"  |              |

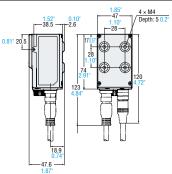
#### FIELD OF VIEW

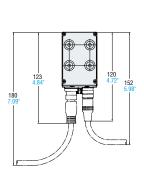
|          | Image capture range<br>(1280 × 1024 pixels) |          |          | ture range<br>00 pixels) |
|----------|---|----------|----------|--------------------------|
| Distance | Width                                       | Height   | Width    | Height                   |
| 20 0.79" | 11 0.43"                                    | 9 0.35"  | 7 0.28"  | 5 0.20"                  |
| 30 1.18" | 15 0.59"                                    | 12 0.47" | 9 0.35"  | 7 0.28"                  |
| 40 1.57" | 19 0.75"                                    | 15 0.59" | 11 0.43" | 8 0.31"                  |



#### DIMENSIONS

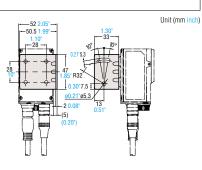




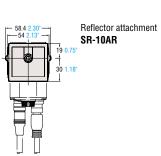




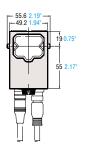
Unit (mm inch)

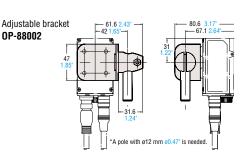












#### Main unit



| Model                     |                         |                          | SR-1000   | SR-1000W  | SR-1000+SR-10AH  |  |
|---------------------------|-------------------------|--------------------------|---|---|--|--|
| уре                       |                         |                          | Standard type   | Wide-field type   | When the high resolution lens attachment is installed        |  |
| Receiver Sensor           |                         |                          | CMOS Image Sensor   |   |  |  |
| Heceiver                  | Number of pixels        |                          | 1280 × 1024 pixels  |   |  |  |
| Illumination light source |                         | ource                    | High intensity red LED  |   |  |  |
| Light emitter             | Pointer light source    | е                        | High intensi  | ty green LED  |  |  |
| Focus adjustmen           | t                       |                          |   | Autofocus*  |  |  |
|                           |                         | 2D                       | QR, MicroQR, DataMatrix (ECC200), GS1 DataMatrix, PDF417, MicroPDF417, GS1 Composite (CC-A/CC-B/CC-C) |   |  |  |
|                           | Supported symbol        | Barcode                  |   | F, 2of5(Industrial 2of5), COOP 2of5, NW-7 (Codabar), CODE1<br>CODE93, JAN/EAN/UPC, Trioptic CODE39, CODE39 Full ASC |  |  |
| Reading                   | Minimum                 | 2D                       | 0.063 mm 0.002"   | 0.082 mm 0.003"   | 0.025 mm 0.001"  |  |
| pecifications             | resolution              | Barcode                  | 0.082 mm 0.003"   | 0.082 mm 0.003"   | 0.082 mm 0.003"  |  |
|                           | Reading distance        |                          | 110 mm to 1000 mm 4.33" to 39.37"   | 50 mm to 600 mm 1.97" to 23.62"   | 20 mm to 40 mm 0.79" to 1.57"                                |  |
|                           | Field of view for rea   | ading                    | 122 × 97 mm 4.80" × 3.82"<br>(Typical example at 400 mm 15.75")                                       | 257 × 206 mm 10.12" × 8.11"<br>(Typical example at 400 mm 15.75")   | 19 × 15 mm 0.75" × 0.59"<br>(Typical example at 40 mm 1.57") |  |
|                           |                         | Number of inputs         |   | 2   |  |  |
|                           |                         | Input type               |   | Bidirectional voltage input   |  |  |
|                           | Control input           | Maximum rating           |   | 26.4 VDC  |  |  |
|                           |                         | Minimum ON voltage       | 15 VDC  |   |  |  |
|                           |                         | Maximum OFF current      |   | 0.2 mA or less  |  |  |
|                           |                         | Number of outputs        | 3   |   |  |  |
|                           |                         | Output type              | Photo MOS relay output  |   |  |  |
|                           |                         | Maximum rating           | 30 VDC  |   |  |  |
| 'O<br>pecifications       | Control output          | Maximum load current     |   | 1 output: 50 mA or less, Total of 3 outputs: 100 mA or less   |  |  |
| pecinications             |                         | Leakage current when OFF |   | 0.1 mA or less  |  |  |
|                           |                         | Residual voltage when ON | 1 V or less   |   |  |  |
|                           | F                       | Communication standard   |   | IEEE 802.3 compilant, 108ASE-T/100BASE-TX   |  |  |
|                           | Ethernet                | Supported protocol       | TCP/IP, SNTP, FTP, BOOTP, MC protocol, Omron PLC link, KV STUDIO, EtherNet/IP™, PROFINET              |   |  |  |
|                           |                         | Communication standard   | RS-232C compliant   |   |  |  |
|                           | Serial<br>communication | Transmission speed       |   | 9600, 19200, 38400, 57600, 115200 bps   |  |  |
|                           |                         | Supported protocol       |   | No-protocol, MC protocol, SYSWAY, KV STUDIO   |  |  |
|                           | USB                     | Communication standard   |   | USB 2.0 Full Speed compliant  |  |  |
|                           | Enclosure rating        | ,                        |   | IP65  |  |  |
|                           | Ambient temperatu       | ire                      | 0 to +45°C 32 to 113°F  |   |  |  |
|                           | Ambient storage te      | mperature                |   | -10 to +50°C 14 to 122°F  |  |  |
| nvironmental              | Relative humidity       |                          | 35 to 85% RH (No condensation)  |   |  |  |
| esistance                 | Storage ambient hu      | umidity                  |   |   |  |  |
|                           | Ambient luminance       |                          | Sunlight: 10000 lux, Incandescent lamp: 6000 lux, Fluorescent lamp: 2000 lux                          |   |  |  |
|                           | Operating environment   |                          | No dust or corrosive gas present  |   |  |  |
|                           | Vibration               |                          | 10 to 55 Hz Double amplitude 0.75 mm 0.030°, 3 hours each in X, Y and Z directions                    |   |  |  |
|                           | Power voltage           |                          |   | 24 VDC ±10%   |  |  |
| Rating                    | Current consumpti       | on                       |   | Approx. 700 mA  |  |  |
| Veight                    |                         |                          | Annrox  | c. 200 g  | Approx. 250 g  |  |

<sup>\*</sup> The focal position can be adjusted automatically during installation.

#### Setup Software

| Model               | SR-H5W   |
|---------------------|--|
| Supported OS        | Microsoft Windows 8 Professional or later 32 bit/64 bit (Except for Windows RT)<br>Microsoft Windows 7 Professional or later 32 bit/64 bit<br>Microsoft Windows VISTA Business/Ultimate SP2 or later 32 bit* |
| Running environment | Processor: 2.0 GHz or faster Memory: 1 6B (32 bit) or 2 6B (64 bit) DVD-ROM drive: Required for installation Screen resolution: 1024 × 768 or better   |

- \* Windows Vista is not supported with the SR-G100.
- .NET Framework 3.5 SP1 or above has been installed. An internet connection is required when installing .NET 3.5 on Windows 8.
- The Control Panel is used for executions when installing .NET 3.5 on Windows 8.

#### SR SERIES LINEUP







Ultra-compact 1D and 2D Code Reader SR-700 Series



High Performance Compact 1D and 2D Code Reader SR-750 Series



TO CONTACT YOUR LOCAL OFFICE 1-888-KEYENCE 1 - 8 8 8 - 5 3 9 - 3 6 2 3

www.keyence.com



#### **GLOBAL NETWORK**

CONTACT YOUR NEAREST OFFICE FOR RELEASE STATUS.

IN Indianapolis

KY Louisville

MA Boston

#### **KEYENCE CORPORATION OF AMERICA**

CA San Jose

CA Cupertino

CA Los Angeles

Head Office 500 Park Boulevard, Suite 200, Itasca, IL 60143, U.S.A. AL Birmingham CO Denver IL Chicago

PHONE: +1-201-930-0100 FAX: +1-855-539-0123 E-mail: keyence@keyence.com MO St. Louis MI Detroit

NJ Elmwood Park

NY Rochester

NC Charlotte

MI Grand Rapids

MN Minneapolis

MO Kansas City

NC Raleigh

OH Cincinnati **OH** Cleveland **OR** Portland

PA Philadelphia TN Nashville PA Pittsburgh TX Austin

SC Greenville

WI Milwaukee

CA San Francisco CA Irvine **KEYENCE CANADA INC.** 

AR Little Rock

AZ Phoenix

**Head Office** PHONE: +1-905-366-7655 FAX: +1-905-366-1122 E-mail: keyencecanada@keyence.com

FL Tampa

GA Atlanta

IA lowa

PHONE: +1-514-694-4740 FAX: +1-514-694-3206 Windsor PHONE: +1-905-366-7655 FAX: +1-905-366-1122

#### WA Seattle TN Knoxville **KEYENCE MEXICO S.A. DE C.V.**

PHONE: +52-55-8850-0100 FAX: +52-81-8220-9097 E-mail: keyencemexico@keyence.com

TX Dallas

<sup>.</sup> SR-1000N and SR-1000WN are available as supported models for India.