













## THE NEXT GENERATION OF HANDHELD CODE READERS















## COMMON CHALLENGES FACED BY HANDHELD DPM CODE READERS

### SLOW

Reading takes time, which causes operations to fall behind and leads to downed production lines



### UNSTABLE

Because reading time is inconsistent, mistakes such as duplicated or skipped reads may occur



### VARIABLE

Readings differ from person to person due to varying levels of understanding



## **DIFFICULT**

Figuring out the best settings takes a long time or can sometimes even be impossible



# THESE ISSUES AREN'T A PROBLEM FOR THE SR-G100

HIGH-SPEED READING

STABLE READING

**EASY OPERATION** 

**EASY CONFIGURATION** 





## HIGH-SPEED READING REGARDLESS OF OPERATOR



## WIRELESS COMMUNICATION IMPROVES FLEXIBILITY

Not only does being wireless improve the SR-G100's general flexibility, it also solves various problems that would otherwise be impossible to overcome.



No need to spend time on wiring



No interference from cables



No need to worry about damaged cables



#### **BUILT-IN FUNCTION BUTTON**

#### EASILY CUSTOMIZABLE SETTINGS

Automatic tuning is done simply by pushing the function button and reading a code. Use the device on site without the need to carry around a PC.



Assess stability of reading and communication

- Reading rate testing
- · Radio wave testing



#### ERGONOMIC SHAPE THAT REINFORCES OPTIMAL POSITIONING CENTER-OF-GRAVITY DESIGN

By naturally inducing a flat position, the SR-G100 reduces the impact of variations between users as well as variations in code marking styles. This makes it possible for anyone to read codes consistently and stably.



#### MULTI-LIGHTING CONTROL FUNCTION

#### AUTOMATIC SELECTION OF OPTIMAL LIGHTING

Polarizing illumination



Removes glare from metal, black resin, etc

Multi-angle lights + partial lighting



Reads DPM codes on metals including cylinders and cast surfaces

























#### CAPABLE OF HANDLING CHALLENGING CODES

Code correction algorithms, developed for the SR-1000 Series of fixed mount code readers, have been optimized specifically for use with handheld code readers. This allows an ideal balance between reading consistency and speed.



Distorted codes on



Codes marked on



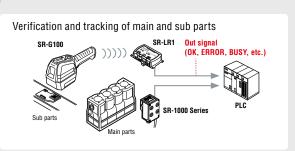
ith projections and depressions

#### COMPATIBLE WITH VARIOUS COMMUNICATION PROTOCOLS

Support for EtherNet/IP™, PROFINET, and PLC link improves PLC compatibility. This allows for interaction with fixed mount code readers installed on equipment or on production lines. In addition, the OUT signal (OK, ERROR, BUSY, etc.) from the communication unit (SR-LR1) makes synchronization with the PLC even easier.







### **CUSTOMIZABLE SETTINGS USING EASY CONFIGURATION SOFTWARE**

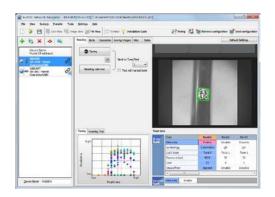
AutoID Network Navigator SR-H5W NEW

Easy connection via USB

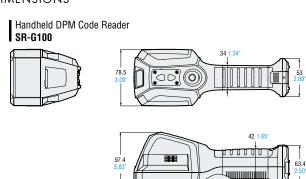
Automatic tuning at the push of a button

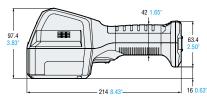
Up to 12 different groups of settings can be stored

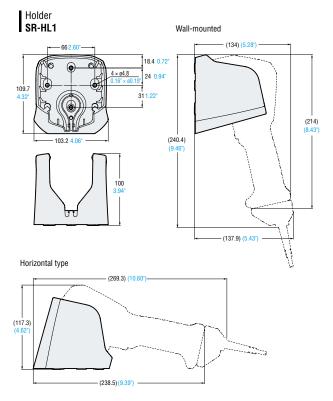
Real-time reading confirmation using Live View

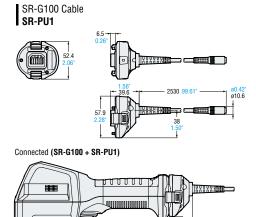


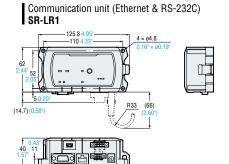
**DIMENSIONS** 



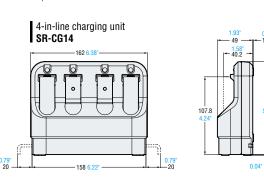








247.1 9.73"-



#### FIELD OF VIEW FOR READING (TYPICAL)

2D code Unit: mm inch								
Distance	Minimum resolution	Horizontal	Vertical					
30 1.18"	0.127 0.005"	45 1.77"	45 2.56"					
70 2.76"	0.25 0.009"	65 2.56"	65 2.56"					
110 4.33"	0.5 0.020"	85 <mark>3.35</mark> "	85 3.35"					

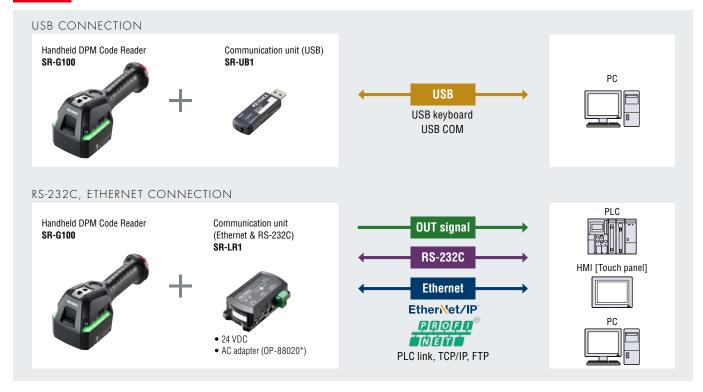
	Barcode			Unit: mm inch
	Distance	Minimum resolution	Horizontal	Vertical
•	80 3.15"	0.25 0.010"	99 3.90"	70 2.76"
	120 4.72"	0.5 0.020"	127 5.00"	90 3.54"
	200 7.87"	1 0.039"	184 7.24"	129 5.08"

#### QUICK SETUP CODE

Settings on the main unit can be changed using codes created through the setup software.



#### STEP 1 SELECT A CONNECTION INTERFACE



#### STEP 2 SELECT A CHARGING/POWER METHOD



<sup>\*</sup> A separate AC cable is required with OP-88020 and SR-CG14 products.



OTHER OPTIONAL ACCESSORIES AND SETUP SOFTWARE





USB cable OP-51580 SR-G100/SR-LR1 for setup



Setup software **SR-H5W** 



#### Handheld DPM Code Reader



Model			SR-G100				
	Sensor		CMOS image sensor				
Receiver	Number of pixels		900 × 900 pixels (2D code), 1280 × 900 pixels (Barcode)				
ight emitter	Illumination light source		High-intensity red LED, High intensity blue LED				
	Supported	2D code	QR, MicroQR, DataMatrix (ECC200), GS1 DataMatrix, PDF417, MicroPDF417, GS1 Composite (CC-A/CC-B/CC-C)				
	symbol	Barcode	CODE39, ITF, 20f5(Industrial 20f5), COOP 20f5, NW-7 (Codabar), CODE128, GS1-128, GS1 DataBar, CODE93, JAN/EAN/UPC, Trioptic CODE39, CODE39 Full ASCII, Pharmacode				
eading pecifications	Minimum	2D code	0.127 mm 0.005*				
Jecincations	resolution	Barcode	0.1 mm 0.004*				
	Focal distance		30 mm 1.18°				
	Wireless communication		Bluetooth Ver. 2.1 + EDR Class 2				
Communication pecifications	Wireless communication	distance	Approx. 10 m 32.81' (line-of-sight)				
pecifications	Setup communication		USB 2.0 Full Speed				
	Enclosure rating		IP54				
	Ambient temperature		0 to +45°C 32 to +113°F/ When charging: 0 to +40°C 32 to +104°F				
	Ambient storage tempera	ture	-10 to +50°C 14 to +122°F				
nvironmental	Relative humidity	,	35 to 95% RH (No condensation)				
esistance	Ambient storage humidity	,	35 to 95% RH (No condensation)				
	Ambient light		Sunlight: 10000 lux, Incandescent lamp: 6000 lux, Fluorescent lamp: 2000 lux				
	Operating environment		No dust or corrosive gas present				
	Drop resistance*		2.0 m 6.56°, 50 times				
ating	Power consumption		Approx. 8.5 W				
Dimensions		,	214×78.5×97.4 mm 8.43° × 3.09° × 3.83°				
/eight			Approx. 375 g (incl. rechargeable battery pack)				
Continuous usage time	(Central value)		Approx. 10 hours (reading count: 10000)				
Charging time			Approx. 4.5 hours				

This is a test value and is not guaranteed.

Communication unit (USB)						
Model		SR-UB1				
	Wireless communication	Bluetooth Ver. 2.1 + EDR Class 2				
Communication	Wireless communication distance	Approx. 10 m 32.81' (line-of-sight)				
specifications	USB communication	USB 2.0 Full Speed				
	Interface	USB-COM, USB keyboard				
	Ambient temperature	0 to +45°C 32 to +113°F				
Environmental	Ambient storage temperature	-10 to +50°C 14 to +122°F				
resistance	Relative humidity	35 to 95% RH (No condensation)				
	Ambient storage humidity	35 to 95% RH (No condensation)				
Rating	Current consumption	Approx. 80 mA				
Dimensions		20.6 × 11.2 × 65.4 mm 0.81* × 0.44* × 2.57*				
Weight		Approx. 15 g				
Supported OS		Microsoft Windows 8 Professional or later 32bit/64bit (Except for Windows RT), Microsoft Windows 7 Professional or later 32bit/64bit				

#### Communication unit (Ethernet & RS-232C)

Model		SR-LR1		
	Wireless communication	Bluetooth Ver. 2.1 + EDR Class 2		
	Wireless communication distance	Approx. 10 m 32.81' (line-of-sight)		
Communication	RS-232C	9600, 19200, 38400, 57600, 115200 bps		
specifications	R5-2320	No-protocol, MC protocol, SYSWAY, KV STUDIO		
	Ethernet	IEEE 802.3, 10BASE-T / 100BASE-TX		
	Etherner	TCP/IP, FTP, MC protocol, Omron PLC link, KV STUDIO, EtherNet/IP <sup>TM</sup> , PROFINET		
	Number of points	3		
0	Output format	Photo MOS relay		
Control	Maximum rating	30 VDC, 100 mA		
output	Leakage current when OFF	0.1 mA or less		
	Residual voltage when ON	1V or less		
	Ambient temperature	0 to +45°C 32 to +113°F		
Environmental	Ambient storage temperature	-10 to +50°C 14 to +122°F		
resistance	Relative humidity	35 to 95% RH (No condensation)		
	Ambient storage humidity	35 to 95% RH (No condensation)		
Rating	Power voltage / current consumption	24 VDC ±10% / Approx. 120 mA, or use dedicated AC adapter (12 VDC) / Approx. 230 mA		
Dimensions		62 × 125.8 × 40 mm 2.44" × 4.95" × 1.57"		
Weight		Approx. 160 g		

#### AC adapter

p	
Model	OP-88020
Rated input	100 to 240 VAC, 50/60 Hz
Rated output	12 VDC, 1.5 A max.
Dimensions	104 × 43 × 31 mm 4.09" × 1.69" × 1.22" (excl. cable area)
Weight	Annroy 125 g

<sup>•</sup> Using SR-PU1 or SR-LR1. AC cable required separately

#### Setup software

Model	SR-H5W
Supported OS	Microsoft Windows B Professional or later 32 bit/64 bit (Except for Windows RT) Microsoft Windows 7 Professional or later 32 bit/64 bit Microsoft Windows VISTA Business/Ultimate SP2 or later 32 bit/6  Microsoft Windows VISTA Business/Ultimate SP2 or later 32 bit*
Running environment	Processor: 2.0 GHz or faster, Memory: 1 GB (32bit) or 2 GB (64bit), 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.



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

www.keyence.com



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

Corporate Office 669 River Drive, Suite 403, Elmwood Park, NJ 07407 PHONE: +1-888-539-3623 FAX: +1-855-539-0123 E-mail: keyence@keyence.com

Sales & Market	ing Head Office	1100 Nortl	h Arlington Heigh	nts Road, Suite 2	10, Itasca, IL 60143	3	PHONE: +1	1-888-539-362	3 FAX: +1-855	-539-0123
<b>AL</b> Birmingham	CA San Jose	CO Denver	IN Indianapolis	MI Grand Rapids	NJ Elmwood Park	OH	Cincinnati	PA Pittsburgh	TX Austin	WI Milwaukee
AR Little Rock	CA Cupertino	FL Tampa	<b>KY</b> Louisville	MN Minneapolis	NY Rochester	OH	Cleveland	<b>SC</b> Greenville	TX Dallas	
AZ Phoenix	CA Los Angeles	GA Atlanta	MA Boston	MO Kansas City	NC Charlotte	0R	Portland	TN Knoxville	VA Richmond	
CA San Francisco	CA Irvine	<b>IL</b> Chicago	MI Detroit	MO St. Louis	NC Raleigh	PA	Philadelphia	TN Nashville	WA Seattle	
KEYENCE CANADA INC. KEYENCE MEXICO S.A. DE C.V.										

Head Office PHONE: +1-905-366-7655 FAX: +1-905-366-1122 E-mail: keyencecanada@keyence.com PHONE: +1-514-694-4740 FAX: +1-514-694-3206 Windsor PHONE: +1-905-366-7655 FAX: +1-905-366-1122 PHONE: +52-55-8850-0100 FAX: +52-81-8220-9097 E-mail: keyencemexico@keyence.com