KEYENCE

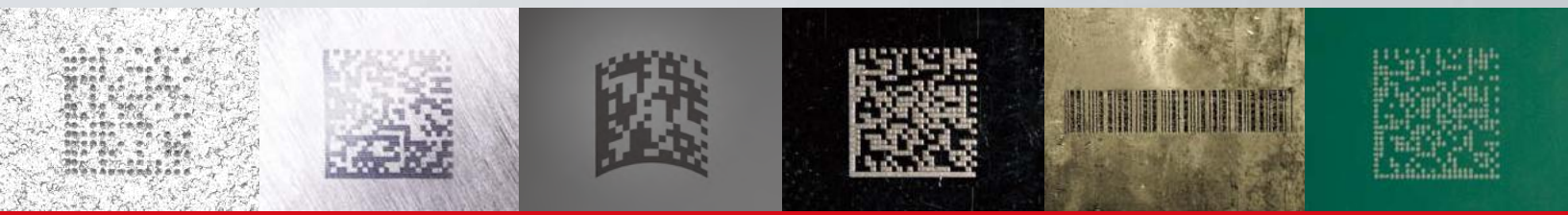
NEW **Handheld DPM Code Reader**

SR-G100

EtherNet/IP PROFINET CE cULus

THE NEXT GENERATION OF HANDHELD CODE READERS





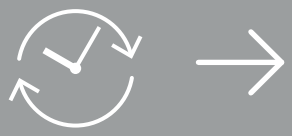
SR-G100

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COMMON CHALLENGES FACED BY HANDHELD DPM CODE READERS

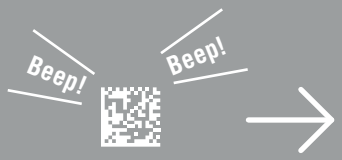
SLOW

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



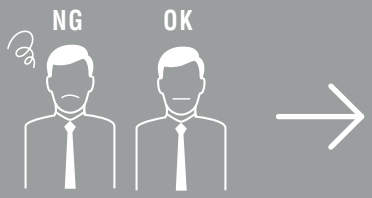
UNSTABLE

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



Downloaded from Arrow.com.

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

HIGH-SPEED READING

STABLE READING

EASY OPERATION

EASY CONFIGURATION



NEW
Handheld DPM Code Reader
SR-G100

Downloaded from Arrow.com.

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

Downloaded from Arrow.com.

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

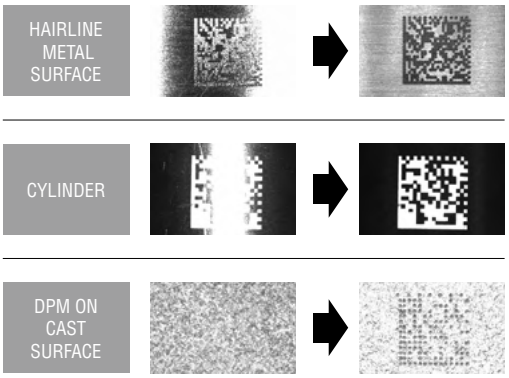


Removes glare from metal, black resin, etc.

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 curved surfaces



Codes marked on machined surfaces



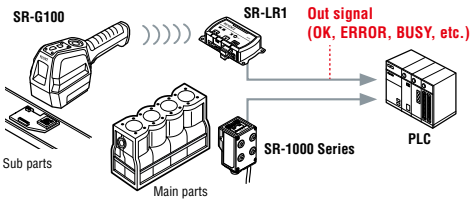
Codes marked on surfaces with projections and depressions

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.

EtherNet/IP™ PROFINET®

Verification and tracking of main and sub parts

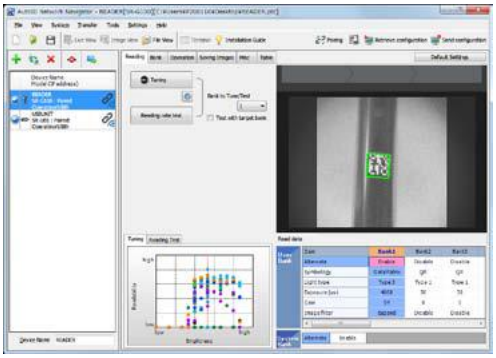


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CUSTOMIZABLE SETTINGS USING EASY CONFIGURATION SOFTWARE

AutoID Network Navigator **SR-H5W** NEW

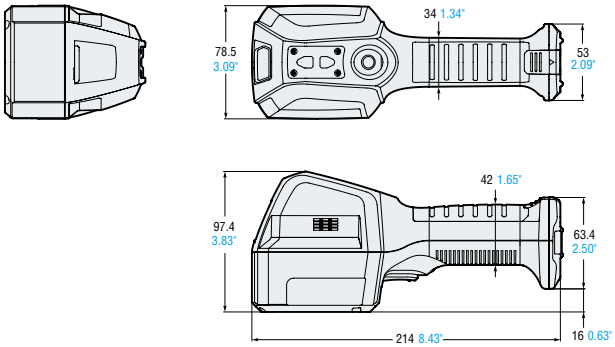
- Easy connection via USB
- Automatic tuning at the push of a button
- Up to 12 different groups of settings can be stored
- Real-time reading confirmation using Live View



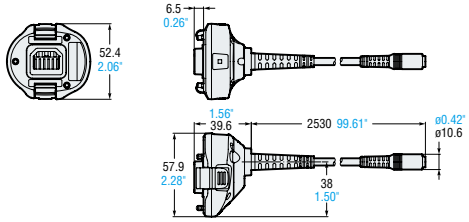
DIMENSIONS

Unit: mm

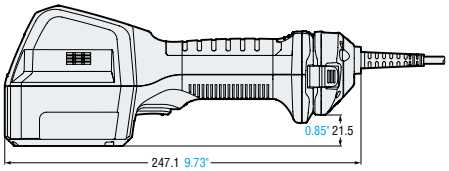
Handheld DPM Code Reader **SR-G100**



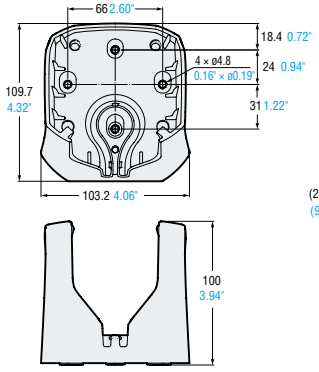
SR-G100 Cable **SR-PU1**



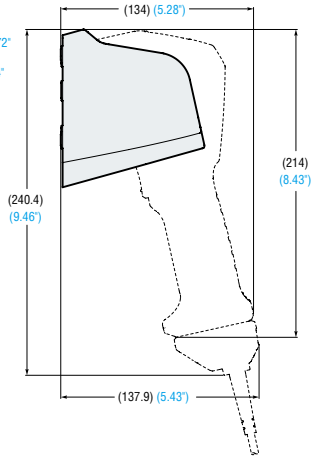
Connected **(SR-G100 + SR-PU1)**



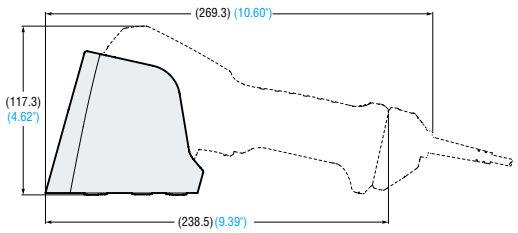
Holder **SR-HL1**



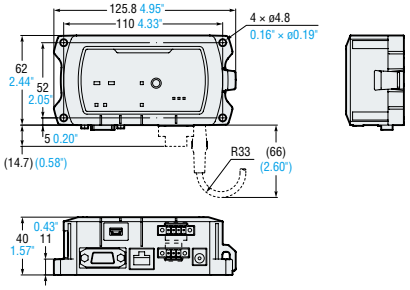
Wall-mounted



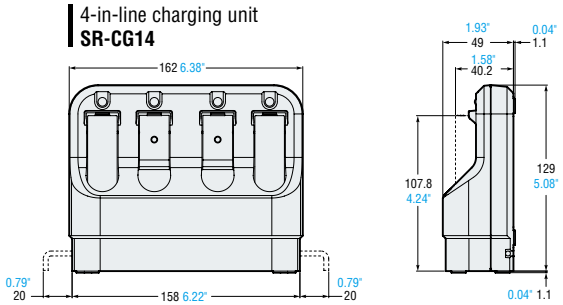
Horizontal type



Communication unit (Ethernet & RS-232C) **SR-LR1**



4-in-line charging unit **SR-CG14**



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 3.35"	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.

(Ex.: Initialization code)

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STEP 1 SELECT A CONNECTION INTERFACE

USB CONNECTION

Handheld DPM Code Reader
SR-G100



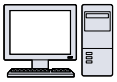
Communication unit (USB)
SR-UB1



USB

USB keyboard
USB COM

PC



RS-232C, ETHERNET CONNECTION

Handheld DPM Code Reader
SR-G100



Communication unit
(Ethernet & RS-232C)
SR-LR1



- 24 VDC
- AC adapter (OP-88020*)

OUT signal

RS-232C

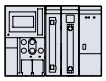
Ethernet

EtherNet/IP

PROFINET

PLC link, TCP/IP, FTP

PLC



HMI [Touch panel]



PC



STEP 2 SELECT A CHARGING/POWER METHOD

WITH RECHARGEABLE BATTERY PACK

Charging with the SR-G100

Rechargeable battery pack
SR-B1



SR-G100 cable
SR-PU1
(Approx. 2.5 m 8.20')



AC adapter
OP-88020*
(Approx. 1.2 m 3.94')



Charging with the rechargeable battery pack charging unit

Rechargeable battery pack
SR-B1



4-in-line charging unit
SR-CG14*
(incl. OP-88020)



WITHOUT RECHARGEABLE BATTERY PACK

Use while plugged-in

SR-G100 cable
SR-PU1
(Approx. 2.5 m 8.20')



AC adapter
OP-88020*
(Approx. 1.2 m 3.94')



* A separate AC cable is required with OP-88020 and SR-CG14 products.

AC CABLE LIST



(Approx. 2 m 6.56')

OP-99022 (USA, Canada) **OP-99102** (Mexico) **OP-99062** (UK) **OP-99032** (Germany, France, Italy, Belgium)
OP-99042 (China) **OP-99112** (Thailand) **OP-99012** (Japan)

OTHER OPTIONAL ACCESSORIES AND SETUP SOFTWARE

Holder
SR-HL1
Supports both flat and wall-mounted positions



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



Setup software
SR-H5W



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SPECIFICATIONS

Handheld DPM Code Reader

Model			SR-G100
Receiver	Sensor		CMOS image sensor
	Number of pixels		900 × 900 pixels (2D code), 1280 × 900 pixels (Barcode)
Light emitter	Illumination light source		High-intensity red LED, High intensity blue LED
Reading specifications	Supported symbol	2D code	QR, MicroQR, DataMatrix (ECC200), GS1 DataMatrix, PDF417, MicroPDF417, GS1 Composite (CC-A/CC-B/CC-C)
		Barcode	CODE39, ITF, 2of5(Industrial 2of5), COOP 2of5, NW-7 (Codabar), CODE128, GS1-128, GS1 DataBar, CODE93, JAN/EAN/UPC, Trioptic CODE39, CODE39 Full ASCII, Pharmacode
	Minimum resolution	2D code	0.127 mm 0.005"
		Barcode	0.1 mm 0.004"
	Focal distance		30 mm 1.18"
Communication specifications	Wireless communication		Bluetooth Ver. 2.1 + EDR Class 2
	Wireless communication distance		Approx. 10 m 32.81' (line-of-sight)
	Setup communication		USB 2.0 Full Speed
Environmental resistance	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 temperature		-10 to +50°C 14 to +122°F
	Relative humidity		35 to 95% RH (No condensation)
	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
Rating	Power consumption		Approx. 8.5 W
Dimensions			214 × 78.5 × 97.4 mm 8.43" × 3.09" × 3.83"
Weight			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
Communication specifications	Wireless communication	Bluetooth Ver. 2.1 + EDR Class 2
	Wireless communication distance	Approx. 10 m 32.81' (line-of-sight)
	USB communication	USB 2.0 Full Speed
	Interface	USB-COM, USB keyboard
Environmental resistance	Ambient temperature	0 to +45°C 32 to +113°F
	Ambient storage temperature	-10 to +50°C 14 to +122°F
	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
Communication specifications	Wireless communication	Bluetooth Ver. 2.1 + EDR Class 2
	Wireless communication distance	Approx. 10 m 32.81' (line-of-sight)
	RS-232C	9600, 19200, 38400, 57600, 115200 bps
		No-protocol, MC protocol, SYSWAY, KV STUDIO
	Ethernet	IEEE 802.3, 10BASE-T / 100BASE-TX
		TCP/IP, FTP, MC protocol, Omron PLC link, KV STUDIO, EtherNet/IP™, PROFINET
Control output	Number of points	3
	Output format	Photo MOS relay
	Maximum rating	30 VDC, 100 mA
	Leakage current when OFF	0.1 mA or less
	Residual voltage when ON	1 V or less
Environmental resistance	Ambient temperature	0 to +45°C 32 to +113°F
	Ambient storage temperature	-10 to +50°C 14 to +122°F
	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

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	Approx. 125 g

• Using SR-PU1 or SR-LR1. AC cable required separately.

Setup software

Model	SR-H5W
Supported OS	Microsoft Windows 8 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*
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.

KEYENCE

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SAFETY INFORMATION
Please read the instruction manual carefully in order to safely operate any KEYENCE product.

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