




## Handheld Reader V410-H

### Versatile, powerful decode performance for any application.

- Simple configuration and management of multiple readers via WebLink<sup>PC</sup>
- Point-and-shoot decode performance and minimal workflow disruption
- Industry-leading 1D/2D DPM decoding performance with Omron's X-Mode Imaging Technology (V410-H XD)
- IP52 sealing to protect against spills
- Captures 1D and 2D barcodes at variable distances and densities
- Covered speaker and screw holes to mitigate bacteria buildup (V410-H HC)
- On-the-fly switching between handheld and hands-free reading



### Product Ordering Information

Part	Description	Part Number
	V410-H XD Handheld Reader, Black Grey, Wired, with X-Mode	V410-HDS4608XD
	V410-H SR Handheld Reader, Black Grey, Wired	V410-HDS4608SR
	V410-H HC Handheld Reader, White, Wired	V410-HDS4608HC

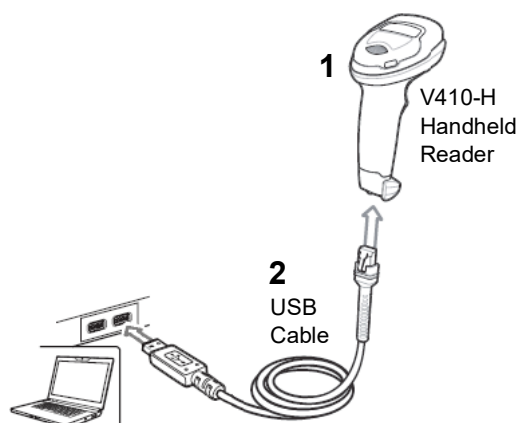
# V410-H

## Accessories

Appearance	Type	Part Number
	Presentation Stand, V410-H	V410-AS0
	Cable Assembly, Style 3 USB, 7 Ft, Mod Plug	V410-WUB-2M
	Cable Assembly, RS232, DB9F, TXD-2, 7 Ft, V410-H	V410-WR-2M
	Kit, V410-H AC Power Supply 5.2VDC, 1.1A	V410-AC0-1

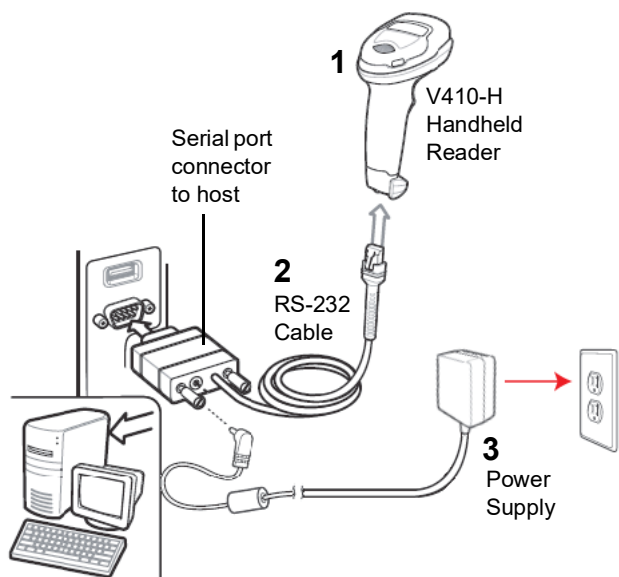
## Configurations

### • USB



Part	Description	Part Number
1	V410-H XD Handheld Reader, Black Grey, Wired, with X-Mode	V410-HDS4608XD
	V410-H SR Handheld Reader, Black Grey, Wired	V410-HDS4608SR
	V410-H HC Handheld Reader, White, Wired	V410-HDS4608HC
2	Cable, USB, 7 ft., Mod Plug	V410-WUB-2M

### • RS-232



Part	Description	Part Number
1	V410-H XD Handheld Reader, Black Grey, Wired, with X-Mode	V410-HDS4608XD
	V410-H SR Handheld Reader, Black Grey, Wired	V410-HDS4608SR
	V410-H HC Handheld Reader, White, Wired	V410-HDS4608HC
2	Cable, RS-232, DB9F, TXD-2, 7 ft.	V410-WR-2M
3	Kit, V410-H AC Power Supply, 5.2 VDC, 1A	V410-AC0-1

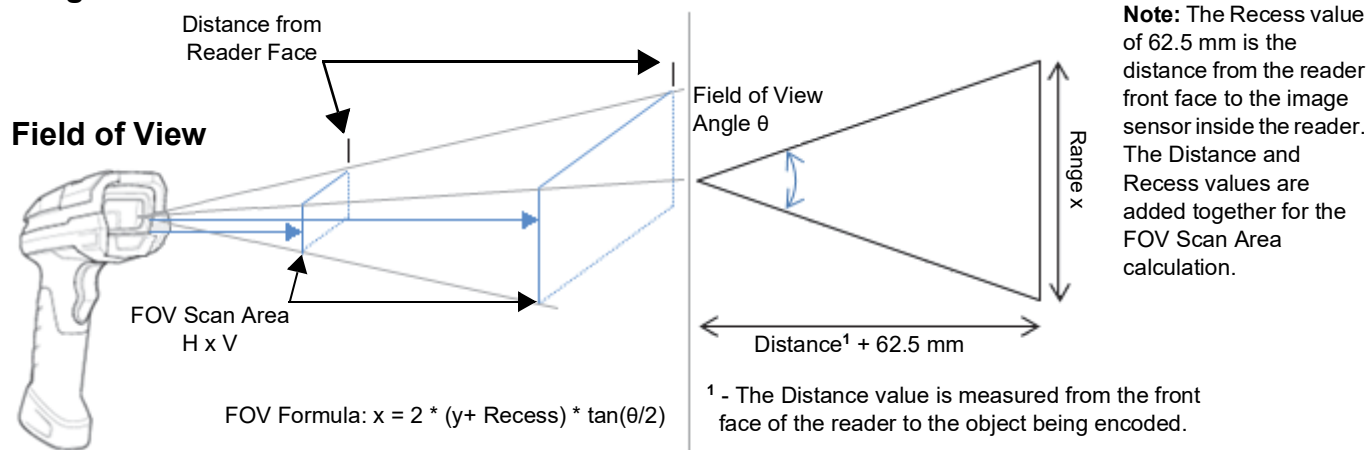
# V410-H

## Ratings and Specifications

V410-H	XD	SR	HC
Item	Description		
<b>Physical Characteristics</b>			
Dimensions	6.5 in. H x 2.6 in. W x 3.9 in. D 165 mm H x 67 mm W x 98 mm D		
Weight	5.7 oz. / 161.9 g		
Input Voltage Range	4.5 to 5.5 VDC Host Powered; 4.5 to 5.5 VDC External Power Supply		
Operating Current at Nominal Voltage (5.0V)	375 mA (typical)	340 mA (typical)	375 mA (typical)
Standby Current (Idle) at Nominal Voltage (5.0V)	150 mA (typical)		
Color	Black Grey	Black Grey	Healthcare White
Supported Host Interfaces	USB 1.1, RS-232		
USB Certification	USB 1.1 Certified		
Keyboard Support	Supports over 90 international keyboards		
Electronic Article Surveillance		Compatible with Checkpoint EAS deactivation system	
User Indicators	Direct Decode Indicator, Good Decode LEDs, rear view LEDs, beeper (adjustable tone and volume), haptic/vibration	Direct Decode Indicator, Good Decode LEDs, rear view LEDs, beeper (adjustable tone and volume)	Direct Decode Indicator, Good Decode LEDs, rear view LEDs, beeper (adjustable tone and volume), haptic/vibration
<b>Performance Characteristics</b>			
Light Source	Aiming Pattern: circular 528nm true green LED	Aiming Pattern: circular 617nm amber LED	Aiming Pattern: circular 528nm true green LED
Illumination	(2) Warm White LEDs	(2) 660nm Red LEDs	(2) Warm White LEDs
Imager Field of View	34° H x 21.6° V nominal	36.1° H x 22.6° V nominal	35° H x 22° V nominal
Image Sensor	1280 x 800 pixels		
Minimum Print Contrast	15% minimum reflective difference		
Skew Tolerance	+/- 60°		
Pitch Tolerance	+/- 60°		
Roll Tolerance	0° - 360°		
<b>Imaging Characteristics</b>			
Graphics Format Support	Images can be exported as Bitmap, JPEG, or TIFF		
Image Quality	96 PPI on an A4 document		
<b>Environmental</b>			
Operating Temperature	32.0° to 122.0° F / 0.0° to 50.0° C		
Storage Temperature	-40.0° to 158.0° F / -40.0° to 70.0° C		
Humidity	5% to 95% RH, non-condensing		
Drop Specification	Designed to withstand multiple drops at 6.0 ft./1.8 m to concrete		
Tumble Specification	Designed to withstand 2,000 tumbles in 1.5 ft./0.5 m tumbler		
Environmental Sealing	IP52		
Approved Cleaners	Standard disinfectants		
Electrostatic Discharge (ESD)	ESD per EN61000-4-2, +/-15 KV Air, +/-8 KV Direct, +/-8 KV Indirect		
Ambient Light Immunity	0 to 10,000 foot-candles / 0 to 107,600 lux		
Accessories	Gooseneck Intellistand		
<b>Symbol Decode Capability</b>			
1D	Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 5, GS1 DataBar, Base 32 (Italian Pharma)		
2D	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, Data Matrix, QR Code, Micro QR, Han Xin, Postal Codes, SecurPharm, DotCode, Dotted Data Matrix	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, Data Matrix, QR Code, Micro QR, Han Xin, Postal Codes, SecurPharm, DotCode, Dotted Data Matrix	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, Data Matrix, QR Code, Micro QR, Han Xin, Postal Codes, SecurPharm
OCR	OCR-A, OCR-B, MICR, US Currency		
Minimum Element Resolution	Code 39 - 2.0 mil Data Matrix - 4.0 mil	Code 39 - 3.0 mil Data Matrix - 5.0 mil	Code 39 - 2.0 mil Data Matrix - 4.0 mil
<b>Decode Ranges (Typical; Printing resolution, contrast, and ambient light-dependent)</b>			
Symbology/Resolution	Near/Far	Near/Far	Near/Far
Code 128: 2 mil	0.3 in. / 8 mm to 2.3 in. / 58 mm		
Code 128: 3 mil	0 in. / 0 mm to 3.5 in. / 88 mm		
Code 128: 5 mil		2.7 in. / 69 mm to 5.4 in. / 137 mm	1.7 in. / 43 mm to 5.0 in. / 127 mm
Code 128: 15 mil	4.2 in. / 107 mm to 8.6 in. / 218 mm		
Code 39: 2 mil	0.2 in. / 5 mm to 3.0 in. / 76 mm		
Code 39: 3 mil	0 in. / 0 mm to 3.8 in. / 96 mm	2.2 in. / 56 mm to 5.4 in. / 137 mm	1.3 in. / 33 mm to 6.0 in. / 152 mm
Code 39: 5 mil	0 in. / 0 mm to 5.2 in. / 132 mm	0.7 in. / 18 mm to 11.0 in. / 279 mm	0.1 in. / 3 mm to 11.5 in. / 292 mm
Code 39: 20 mil		0 in. / 0 mm to 44.0 in. / 1118 mm	0.6 in. / 15 mm to 29.0 in. / 737 mm

V410-H	XD	SR	HC
Item	Description		
PDF417: 4 mil	0 in. / 0 mm to 3.3 in. / 84 mm		
PDF417: 5 mil	0 in. / 0 mm to 3.8 in. / 96 mm		
PDF417: 6.6 mil	0 in. / 0 mm to 4.5 in. / 114 mm		
PDF417: 6.7 mil		1.3 in. / 33 mm to 10.0 in. / 254 mm	0.6 in. / 15 mm to 9.3 in. / 236 mm
UPC: 13 mil (100%)	0 in. / 0 mm to 8.5 in. / 215 mm	0 in. / 0 mm to 28.0 in. / 711 mm	0 in. / 0 mm to 18.0 in. / 457 mm
Data Matrix: 4 mil	0.2 in. / 5 mm to 2.8 in. / 71 mm		
Data Matrix: 5 mil	0 in. / 0 mm to 3.4 in. / 86 mm		
Data Matrix: 10 mil	0 in. / 0 mm to 4.8 in. / 122 mm	1.0 in. / 25 mm to 11.5 in. / 292 mm	0.2 in. / 5 mm to 9.5 in. / 241 mm
QR Code: 10 mil	0 in. / 0 mm to 4.5 in. / 114 mm		
QR Code: 20 mil		0 in. / 0 mm to 17.5 in. / 445 mm	0 in. / 0 mm to 13.5 in. / 343 mm
<b>Utilities and Device Management</b>			
WebLink <sup>PC</sup>	Programs reader parameters, upgrades firmware, provides encoded barcode data, allows image-based troubleshooting		
<b>Regulatory Compliance</b>			
LED Safety Standard	IEC 62471 Exempt Risk Group		
EMC Standards	EN 55032, EN 55035, FCC Part 15, Subpart B (Class B)		
Safety Standards	EN 62368-1		
Certifications	RCM, EAC, BSMI, CE, cULus (KC under application)		

### Imager Field of View



FOV Formula:  $x = 2 * (y + \text{Recess}) * \tan(\theta/2)$

#### XD: Image Field of View in degrees = 34 (horizontal) x 21.6 (vertical)

y (mm)	y + Recess	θ	Range x (mm)	FOV Scan Area H x V (mm)	Distance from Reader Face (mm)	FOV Scan Area H x V (in)	Distance from Reader Face (in)
5	67.5	34	41	41 x 26	5	1.6 x 1.0	0.2
5	67.5	21.6	26	-	-	-	-
71	133.5	34	82	82 x 51	71	3.2 x 2.0	2.8
71	133.5	21.6	51	-	-	-	-

#### SR: Image Field of View in degrees = 36.1 (horizontal) x 22.6 (vertical)

y (mm)	y + Recess	θ	Range x (mm)	FOV Scan Area H x V (mm)	Distance from Reader Face (mm)	FOV Scan Area H x V (in)	Distance from Reader Face (in)
25	87.5	36.1	57	57 x 35	25	2.2 x 1.4	1.0
25	87.5	22.6	35	-	-	-	-
445	507.5	36.1	331	331 x 203	445	13.0 x 8.0	17.5
445	507.5	22.6	203	-	-	-	-

#### HC: Image Field of View in degrees = 35 (horizontal) x 22 (vertical)

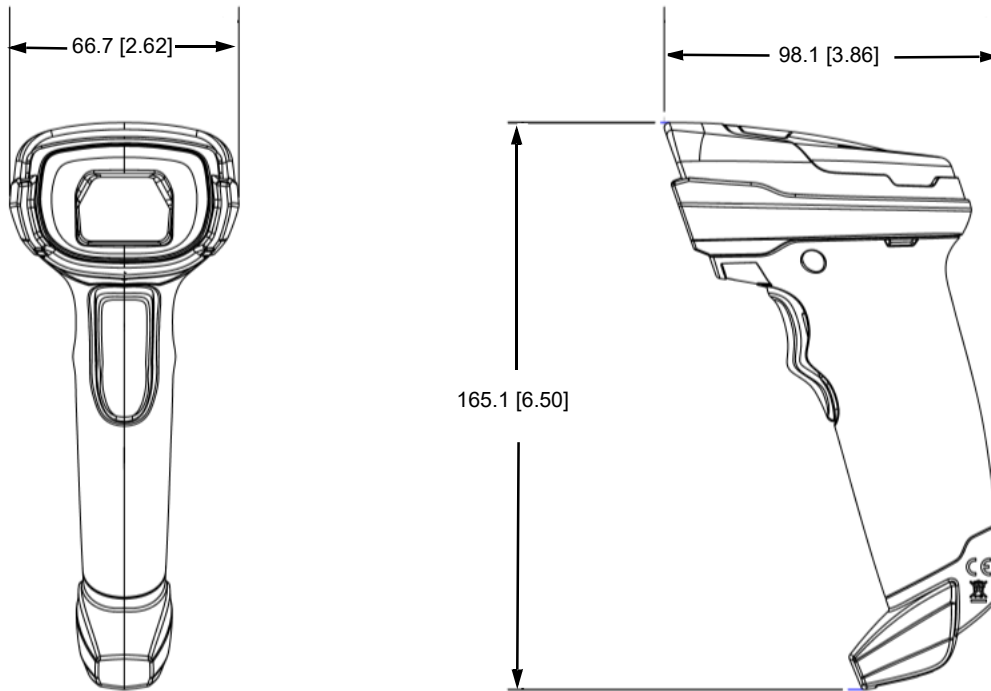
y (mm)	y + Recess	θ	Range x (mm)	FOV Scan Area H x V (mm)	Distance from Reader Face (mm)	FOV Scan Area H x V (in)	Distance from Reader Face (in)
3	65.5	35	41	41 x 25	3	1.6 x 1.0	0.1
3	65.5	22	25	-	-	-	-
292	354.5	25	223	223 x 138	292	8.8 x 5.4	11.5
292	354.5	22	138	-	-	-	-

# V410-H

## Dimensions

(Unit: mm / [in])

### V410-H Handheld Reader



**Note:** Reader dimensions are the same for the V410-H XD, V410-H SR, and V410-H HC.

## WebLinkPC

Screenshot of WebLinkPC Setup screen where the user configures the handheld reader to meet application requirements. To download WebLinkPC, go to [www.automation.omron.com/weblinkpc](http://www.automation.omron.com/weblinkpc).

## Related Manuals

Man. No.	Model	Manual
Z439 (84-9000362-02)	V410-HDS4608SR, V410-HDS4608XD, V410-HDS4608HC, V450-HDS3608-0001, V450-HDS3608-0002	V410-H and V450-H Handheld Barcode Reader User Manual

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