

### Product type designation

**MV420 SR-B code reader**  
SIMATIC MV420 SR-B;BASIC TYPE COMPACT OPTICAL READER  
FOR 1D AND 2D CODES;IP67



### Suitability for operation

1D codes: Int. 2/5, Code 128, Code 39, EAN 13, EAN 8, UPC-A, UPC-E, GS1, 2D codes: DMC, PDF417 (without: Truncated, Micro and Macro), QR (without: Micro and Macro), Vericode

### Interfaces

#### Type of electrical connection

- |                                    |                   |
|------------------------------------|-------------------|
| • of Industrial Ethernet interface | M12, d-coded      |
| • of the RS 422 interface          | M16, 12-pin, male |
| • of the RS 232 interface          | M16, 12-pin, male |
| • for supply voltage               | M16, 12-pin, male |
| • at the digital inputs/outputs    | M16, 12-pin, male |

#### Number of digital inputs

3

#### Number of digital outputs

3

#### Digital input version

1 high-speed trigger input, 2 opto-isolated inputs (NPN, PNP capability) optionally as output

#### Digital output version

1 high-speed strobe output for external lighting, 2 isolated outputs optionally as input, short-circuit-proof, max. 100 mA

### Optical data

#### Design of image sensor / of the camera

CMOS chip, VGA (640 x 480), WVGA (752 x 480)

Type of image capture	Global shutter
Range	10 ... 400 mm
Range / Note	Adjustable within the range
Mounting type / of lens	Fixed (M12)
Type of light source	Integrated lighting or external lighting according to accessories list
Image acquisition frequency / maximum	50 Hz
Code reading rate / maximum	29 1/s
Type of focusing	Manual adjustment on the lens cover

#### Supply voltage, current consumption, power loss

Supply voltage	
<ul style="list-style-type: none"> <li>• at DC / Rated value</li> <li>• at DC</li> </ul>	24 V 19.2 ... 28.8 V
Consumed current / at DC / at 24 V	
<ul style="list-style-type: none"> <li>• typical</li> <li>• maximum</li> </ul>	0.17 A 2 A
Buffering time / in the event of power failure / minimum	0.01 s

#### Mechanical data

Material	Die-cast aluminum
Color	petrol blue

#### Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	0 ... 50 °C -30 ... +70 °C -30 ... +70 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP67
Shock resistance	According to IEC 60068-2
Shock acceleration	150 m/s <sup>2</sup>
Vibrational acceleration	10 m/s <sup>2</sup>

#### Design, dimensions and weight

Width	52.5 mm
Height	70.7 mm
Depth	39.5 mm
Net weight	0.25 kg
Mounting type	2 x M4 screws

#### Product properties, functions, components / general

Product feature / silicon-free	Yes
Display version	4 LEDs

#### Standards, specifications, approvals

Certificate of suitability	CE, KCC, F&B suitable, UL
MTBF / at 40 °C	95 y
MTBF	95 y

### Accessories

accessories	Mounting brackets, built-in ring lamps, M12 lenses
-------------	--

### Further Information / Internet Links

Internet-Link	
<ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET SELECTION TOOL</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Image database</li> <li>• to website: CAx Download Manager</li> <li>• to website: Industry Online Support</li> </ul>	<p><a href="https://support.industry.siemens.com/cs/ww/en/view/67384964">https://support.industry.siemens.com/cs/ww/en/view/67384964</a></p> <p><a href="http://www.siemens.com/codereader">http://www.siemens.com/codereader</a></p> <p><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></p> <p><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a></p> <p><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a></p> <p><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>

**last modified:** 08/07/2017