

### Product type designation

### MV420 SR-B code reader

SIMATIC MV420 SR-B; Base model 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
- of the RS 422 interface
- of the RS 232 interface
- for supply voltage
- at the digital inputs/outputs

M12, d-coded  
M16, 12-pin, male  
M16, 12-pin, male  
M16, 12-pin, male  
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

#### 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 weights

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

#### Product features, product functions, product components / general

Display version	4 LEDs
Protocol / is supported / Media Redundancy Protocol (MRP)	No

Product function / of the PROFINET IO device / is supported / H-Sync forwarding	No
Protocol / is supported	
• LLDP	Yes
• PROFINET IO protocol	Yes
• TCP/IP	Yes
• SNMP v1	Yes
• SNMP v2	No
• SNMP v3	No
• DCP	Yes
• EtherNet/IP protocol	No
• OPC UA	No
Product feature / silicon-free	Yes

### Standards, specifications, approvals

Certificate of suitability	CE, KCC, F&B suitable, UL
MTBF	95 y

### accessories

accessories	Mounting brackets, built-in ring lamps, M12 lenses
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### Further information / Internet-Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	<a href="https://support.industry.siemens.com/cs/ww/en/view/67384964">https://support.industry.siemens.com/cs/ww/en/view/67384964</a>
• to website: Industrial communication	<a href="http://www.siemens.com/codereader">http://www.siemens.com/codereader</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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