

Digital input modules  
**32 inputs**  
**S20-DI-32/1**



Digital input modules

**32 inputs** ■ **S20-DI-32/1**

- 32 digital inputs according to EN 61131-2 type 1 and type 3
- 24 V DC / 2,4 mA
- Connection of sensors in 1-wire technology
- Minimum update time < 100  $\mu$ s
- Filter times can be set in three steps: < 100  $\mu$ s, 1000  $\mu$ s or 3000  $\mu$ s
- Maximum input frequency: 5 kHz
- Electronic device nameplate
- Diagnostic and status indicators

**Documentation**

- Data sheet
- Application description

These modules are designed for use within an IndraControl S20 station. The digital input modules are used to connect 24 V DC sensors. The sensors can be connected with up to 1-wire connection technology. The filter times can be set on the module.

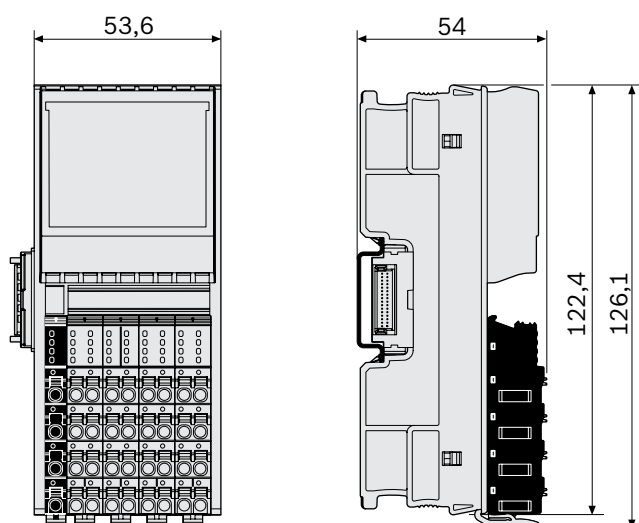
**Technical data**

	<b>S20-DI-32/1</b>
<b>Local bus interface</b>	
Designation	S20 local bus
Connection type	Connection for bus socket module
<b>Supply for module electronics</b>	
Supply voltage	24 V DC
Supply voltage range	19.2 ... 30 V DC (including all tolerances, incl. rippling)
Logic voltage $U_{\text{BUS}}$	5 V DC (via bus socket module)
Current consumption of $U_{\text{BUS}}$	Max. 120 mA
Protective circuit	Overvoltage protection, reverse polarity protection
<b>Digital inputs</b>	
Connection technology of the sensors	1-wire connection
Number	32
Connection type	Spring-cage connection with direct plug technology
Connection data solid / flexible / AWG	0,2 ... 1,5 mm <sup>2</sup> / 0,2 ... 1,5 mm <sup>2</sup> / 24-16
Interpretation	Acc. to EN 61131-2 type 1 and type 3
Nominal input voltage $U_{\text{INenn}}$	24 V DC
Max. Current consumption from $U_{\text{I}}$	50 mA
Nominal input current at $U_{\text{INenn}}$	2,4 mA
Protective circuit inputs	Reverse polarity protection
Input filter configurable	< 100 $\mu$ s; 1000 $\mu$ s; 3000 $\mu$ s (default)
<b>System times</b>	
System bus cycle time	2 $\mu$ s
Offset per module	1 $\mu$ s
<b>Load</b>	

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Vibration resistance	5 g according to EN 60068-2-6
Shock resistance	25 g according to EN 60068-2-27
Shock resistance (continuous shock) according to EN 60068-2-29	10 g according to EN 60068-2-29
Emitted interference	Class B according to EN 61000-6-3
Interference immunity	According to EN 61000-4
<b>Environmental conditions</b>	
Permissible temperature (operation)	-25 °C ... +60 °C
Permissible humidity (operation)	5 to 95%, no dewing
Permissible humidity (storage)	5 to 95%, no dewing
Protection category	IP20

**Dimensions**

		S20-DI-32/1
<b>Dimensions</b>		
Height H	[mm]	126.1
Width B	[mm]	53.6
Length T	[mm]	54

**Ordering information**

Type code	Description	Material number:
S20-DI-32/1	IndraControl S20 digital input module, 32 inputs, complete with accessories (bus base module)	R911172533

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Type code	Description	Material number:
S20-BS	Bus base module (spare part)	R911172540

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It must be remembered that our products are subject to a natural process of wear and aging.