

ATEX Compliant

Decentralized Serial Wiring (GW System, 4 Branches)

56-EX500 Series    **US**

How to Order

GW Unit



GW unit

56-EX500-GPR1A

ATEX category 3

Communication protocol

PR1A PROFIBUS DP



II 3G Ex ec IIC T4 Gc 5°C ≤ Ta ≤ 45°C
II 3D Ex tc IIIC T57°C Dc IP65

(56-EX500-GPR1A)

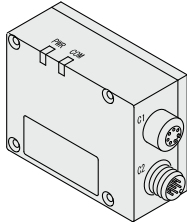
Specifications

GW Unit

Model	56-EX500-GPR1A
Protocol	PROFIBUS DP
Communication speed	(9.6/19.2/45.45/93.75/187.5/500 kbps), (1.5/3/6/12 Mbps)
Rated voltage	24 VDC
Power supply voltage range	Input and control unit power supply: 24 VDC ±10% Valve power supply: 24 VDC +10%/-5%
Current consumption	200 mA or less (single GW unit)
Number of inputs/outputs	Maximum 32 inputs/64 outputs
Number of input/output branches	4 branches (8 inputs/16 outputs per branch)
Input supply current	Max. 1.4 A (Max. 0.35 A per branch)
Output supply current	Max. 3.0 A (Max. 0.75 A per branch)
Branch cable length	5 m or less between connected devices (10 m or less per branch)
Operating temperature range	Operating: 5 to 45°C, Stored: -25 to 70°C (No freezing and condensation)
Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)
Enclosure	IP65
Weight	470 g

All other specifications are the same as the standard products EX500 series.
For details, refer to the **Web Catalog**.

Type 1	EX260
Type 1	EX123/124/126
Type 2	EX500
Type 2	EX600
Type 3	EX245
Type 3	EX250
Type 1	EX120/121/122
Type 1	EX140
Type 1	EX180
Type 2	EX510
Type 2	M8/M12
Type 2	ATEX

How to Order**SI Unit**

II 3G Ex ec IIC T5 5°C ≤ Ta ≤ 45°C
II 3D Ex tc IIIC T52°C Dc IP67

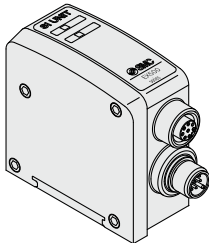
56 – EX500 – S001

• ATEX category 3

• Applicable solenoid valve: SV series

Specifications**SI Unit**

Model		56-EX500-S001
Output specifications	Number of outputs	16 points
	Output type	Sink/NPN (Positive common)
	Supplied current	Max. 0.65 A
	Rated voltage	24 V
Internal current consumption		100 mA or less
Environmental resistance	Enclosure	IP67
	Operating temperature range	Operating: 5 to 45°C, Stored: –25 to 70°C (No freezing and condensation)
	Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)
Weight		115 g

How to Order**SI Unit**

II 3G Ex ec IIC T5 5°C ≤ Ta ≤ 45°C
II 3D Ex tc IIIC T54°C Dc IP67

56 – EX500 – Q 0 01

• ATEX category 3

• Output type

Applicable solenoid valve: VQC series

0	Sink/NPN (Positive common)
1	Source/PNP (Negative common)

Specifications**SI Unit**

Model		56-EX500-Q001	56-EX500-Q101
Output specifications	Number of outputs	16 points	
	Output type	Sink/NPN (Positive common)	Source/PNP (Negative common)
	Rated voltage	24 VDC	
	Supplied current	Max. 0.75 A	
Internal current consumption		100 mA or less	
Environmental resistance	Enclosure	IP67	
	Operating temperature range	Operating: 5 to 45°C, Stored: –25 to 70°C (No freezing and condensation)	
	Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)	
Weight		105 g	

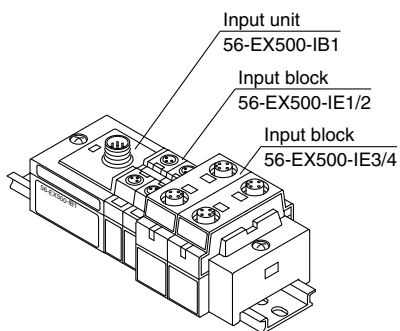
How to Order

Input Unit

56-EX500-IB1

• ATEX category 3

II 3G Ex ec IIC T5 Gc X 5°C ≤ Ta ≤ 45°C
II 3D Ex tc IIIC T60°C Dc X IP65



Input Block

56-EX500-IE 1

• ATEX category 3

• Block type

II 3G Ex ec IIC T5 Gc 5°C ≤ Ta ≤ 45°C
II 3D Ex tc IIIC T60°C Dc IP65

(Input block 56-EX500-IE1 to 4)

1	M8 connector, 2 inputs, PNP sensor input
2	M8 connector, 2 inputs, NPN sensor input
3	M12 connector, 2 inputs, PNP sensor input
4	M12 connector, 2 inputs, NPN sensor input

Specifications

Input Unit

Model	56-EX500-IB1
Connection block	EX500-IE□ (Mixed combination is possible.)
Number of inputs	Max. 8 points (56-EX500-GPR1A)
Block supply voltage	24 VDC
Block supply current	Max. 0.35 A (56-EX500-GPR1A)
Current consumption	100 mA or less
Operating temperature range	Operating: 5 to 45°C Stored: -25 to 70°C (No freezing and condensation)
Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)
Enclosure	IP65
Weight*1	100 g (Input unit + End block)

*1 Not including the DIN rail weight

Input Block

Model	56-EX500-IE1,3	56-EX500-IE2,4
Input type	PNP sensor input	NPN sensor input
Sensor connector	IE1/2: M8 connector (3 pins), IE3/4: M12 connector (4 pins)	
Number of inputs	IE1/2/3/4: 2 inputs	
Rated voltage	24 VDC	
Sensor supply current	Max. 30 mA/Sensor	
Operating temperature range	Operating: 5 to 45°C Stored: -25 to 70°C (No freezing and condensation)	
Operating humidity range	Operating, Stored: 35 to 85%RH (No condensation)	
Enclosure	IP65	
Weight	IE1/2: 20 g, IE3/4: 40 g	

The 56-EX500-IE5/6 input block (M8 connector, 8 points integrated type) is to be discontinued as of November 2021.

- **PNP input (M8 connector)**
Please consider ordering the 56-EX500-IE1 (2-point input) as a substitute.
- **NPN input (M8 connector)**
Please consider ordering the 56-EX500-IE2 (2-point input) as a substitute.

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	EX123/124/126
Type 2	EX500
	EX600
Type 3	EX245
	EX250
Type 1	EX140
	EX180
Type 2	EX510
	M8/M12
	ATEX