

AJ65SBTB3-16D5
AJ65SBTB1-32D5
AJ65SBTB32-16DR

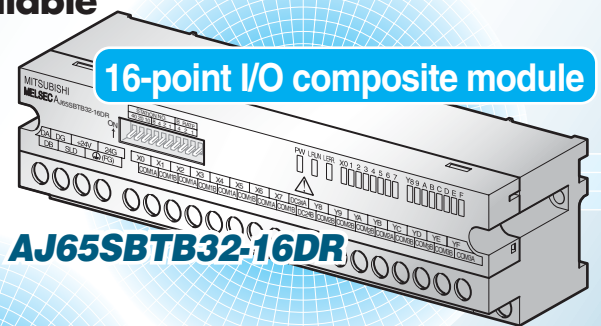
CC-Link Compact Type Remote I/O Module

Introducing 24 V DC I/O composite module and 5 V DC input modules!

24 V DC input and relay output available

- By combining input and output in one module, the footprint and cost are reduced by 25%.

AJ65SBTB32-16DR

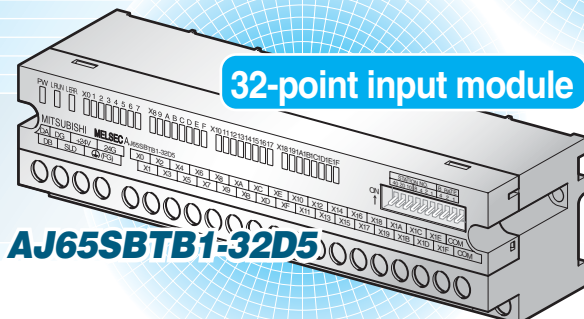
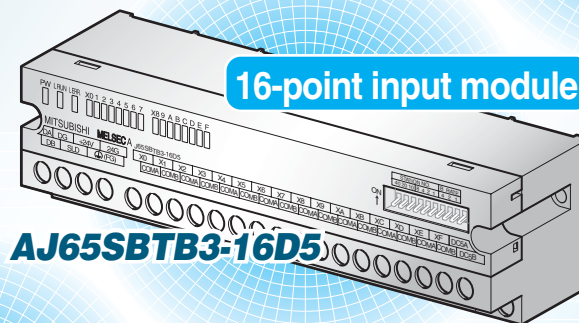


Supports 5 V DC input

- TTL/C-MOS output sensors can be connected directly.

AJ65SBTB3-16D5

AJ65SBTB1-32D5



**Positive/negative common
(sink/source) input for all modules**

Mitsubishi Electric Corporation Nagoya Works is a factory certified for ISO14001 (standards for environmental management systems) and ISO9001 (standards for quality assurance management systems)



Features

1. Expanded CC-Link module lineup!

- AJ65SBTB32-16DR : 3-wire type, 24 V DC input, 8 points, positive/negative common (sink/source);
2-wire type, relay output, 8 points, 4 point/common
- AJ65SBTB3-16D5 : 3-wire type, 5 V DC input, 16 points, positive/negative common (sink/source)
- AJ65SBTB1-32D5 : 1-wire type, 5 V DC input, 32 points, positive/negative common (sink/source)

2. 24 V DC inputs and relay outputs in one unit! **AJ65SBTB32-16DR**

The footprint and cost can be reduced by 25%. In addition, by using 3 wires for input and 2 for output, direct connection to external devices is realized.

3. Supports 5 V DC input! **AJ65SBTB3-16D5** **AJ65SBTB1-32D5**

Supporting 5 V DC inputs allows these modules to connect directly to TTL/C-MOS output sensors. Additionally, the 16-point input module uses 3 wires which supplies power to sensors without an external power supply.

Performance specifications

(1) DC input module

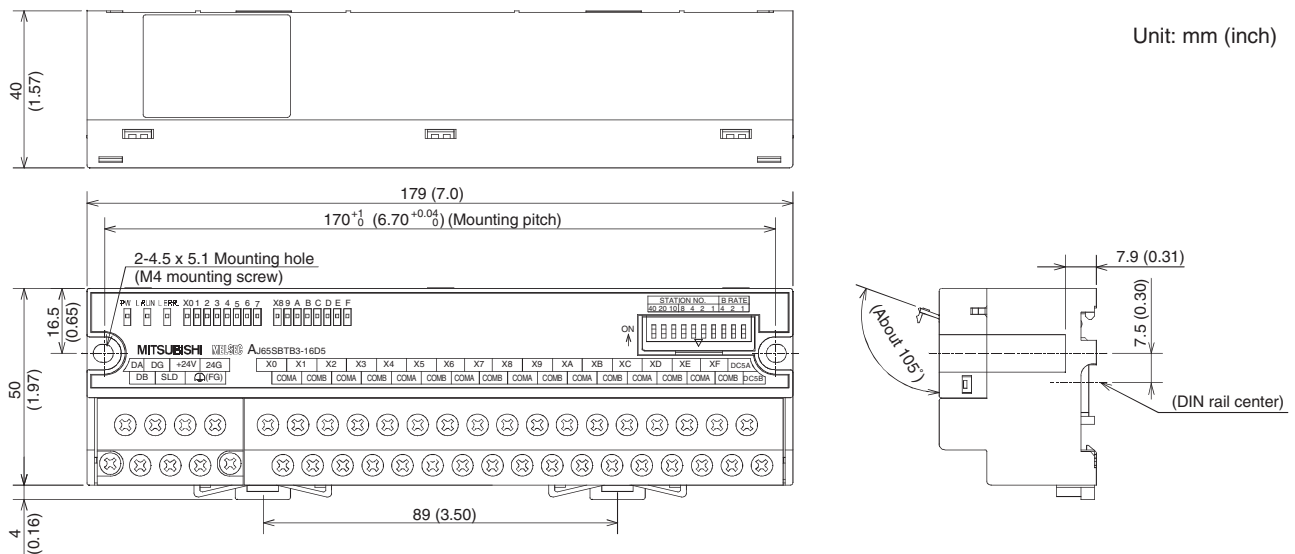
Item		AJ65SBTB3-16D5	AJ65SBTB1-32D5
Number of input points		16 points	32 points
Isolation method		Photocoupler	
Rated input voltage		5 V DC	
Rated input current		Approx. 4.0 mA	
Operating voltage range		5 V DC (+20/-15%, ripple ratio: within 5%)	
Max. simultaneous ON input points		100%	
ON voltage/ON current		3.5 V or higher/2 mA or higher	
OFF voltage/OFF current		1.5 V or lower/1 mA or lower	
Input resistance		Approx. 1.0 kΩ	
Response time	OFF→ON	1.5 ms or lower (at 5 V DC)	
	ON→OFF	1.5 ms or lower (at 5 V DC)	
Wiring method for common		16 points/common (terminal block 3-wire type)	32 points/common (terminal block 1-wire type)
Input type		Positive/negative common (sink/source)	
Number of stations occupied		1 station 32 points assignment (use 16 points)	1 station 32 points assignment (use 32 points)
I/O module power supply	Voltage	20.4 to 26.4 V DC (ripple ratio: within 5%)	
	Current	30 mA or lower (at 24 V DC, all points ON)	35 mA or lower (at 24 V DC, all points ON)
Noise immunity		DC type noise voltage 500 Vp-p, noise width 1 μs, noise frequency 25 to 60 Hz (noise simulator condition)	
Dielectric withstand voltage		500 V AC for 1 minute between all DC external terminals and ground	
Insulation resistance		10 MΩ or higher, measured with a 500 V DC insulation resistance tester between all DC external terminals and ground	
Degree of protection		IP2X	
Weight		0.25 kg	0.26 kg
External wiring system	Communication, I/O module power supply	7-point terminal block (two-piece) [Transmission circuit, I/O module power supply, FG] M3 x 5.2 Tightening torque range: 59 to 88 N•cm, applicable crimping terminals: 2 max.	
	I/O power supply, I/O	34-point direct-mount terminal block [I/O power supply, I/O signal] M3 x 5.2 Tightening torque range: 59 to 88 N•cm, applicable crimping terminals: 2 max.	
Module mounting screw		M4 screw with plain washer finished round (tightening torque range: 79 to 108 N•cm) Module can be mounted using DIN rail and can be mounted in 6 different directions	
Applicable DIN rail		TH35-7.5Fe, TH35-7.5Al (conforming to IEC 60715)	
Applicable crimping terminal		<ul style="list-style-type: none"> •RAV1.25-3 (conforming to JIS C 2805) [Applicable wire size: 0.3 to 1.25 mm²] •V2-MS3, RAP2-3SL, TGV2-3N [Applicable wire size: 1.25 to 2.0 mm²] 	

(2) DC input/relay output composite module

AJ65SBTB32-16DR			
Input		Output	
Number of input points	8 points	Number of output points	8 points
Isolation method	Photocoupler	Isolation method	Relay
Rated input voltage	24 V DC	Rated load voltage	24 V DC (resistive load) 240 V AC (cosφ=1) 2 A/point, 4A/common
Rated input current	Approx. 7 mA	Number of simultaneous ON points	All points
Operating voltage range	19.2 to 26.4 V DC (ripple ratio: within 5%)	Min. open/close load	5 V DC/1 mA
Max. simultaneous ON input points	100%	Max. switching voltage	264 V AC 125 V DC
ON voltage/ON current	14 V or higher/3.5 mA or higher	Service life	Mechanical 20 million times or more Electrical Rated switching voltage/current loads 100,000 times or more 200 V AC 1.5 A, 240 V AC 1 A (cosφ=0.7): 100,000 times or more 200 V AC 1 A, 240 V AC 0.5 A (cosφ=0.35): 100,000 times or more 24 V DC 1 A, 100 V DC 0.1 A (L/R=7 ms): 100,000 times or more
OFF voltage/OFF current	6 V or lower/1.7 mA or lower		
Input resistance	Approx. 3.3 kΩ	Max. switching frequency	3,600 times/hour
Response time	OFF→ON	1.5 ms or lower (at 24 V DC)	Response time
	ON→OFF	1.5 ms or lower (at 24 V DC)	
Wiring method for common	8 points/common (terminal block 3-wire type)	Wiring method for common	4 points/common (terminal block 2-wire type)
Input type	Positive/negative common (sink/source)	Surge suppression	None
Number of stations occupied	1 station 32 points assignment (use 16 points)		
I/O module power supply	Voltage	20.4 to 26.4 V DC (ripple ratio: within 5%)	
	Current	85 mA or lower (at 24 V DC, all points ON)	
Noise immunity	AC type noise voltage 1500 Vp-p, DC type noise voltage 500 Vp-p, noise width 1 μs, noise frequency 25 to 60 Hz (noise simulator condition)		
Dielectric withstand voltage	2830 V AC rms/3 cycles between all AC external terminals and ground (2000 m above sea level) 500 V AC for 1 minute between all DC external terminals and ground		
Insulation resistance	10 MΩ or higher, measured with a 500 V DC insulation resistance tester between all AC external terminals and ground 10 MΩ or higher, measured with a 500 V DC insulation resistance tester between all DC external terminals and ground		
Degree of protection	IP1X		
Weight	0.28 kg		
External wiring system	Communication, I/O module power supply	7-point terminal block (two-piece) [Transmission circuit, I/O module power supply, FG] M3 x 5.2 Tightening torque range: 59 to 88 N•cm, applicable crimping terminals: 2 max.	
	I/O power supply, I/O	34-point direct-mount terminal block [I/O power supply, I/O signal] M3 x 5.2 Tightening torque range: 59 to 88 N•cm, applicable crimping terminals: 2 max.	
Module mounting screw	M4 screw with plain washer finished round (tightening torque range: 79 to 108 N•cm) Module can be mounted using DIN rail and can be mounted in 6 different directions		
Applicable DIN rail	TH35-7.5Fe, TH35-7.5Al (conforming to IEC 60715)		
Applicable crimping terminal	<ul style="list-style-type: none"> • RAV1.25-3 (conforming to JIS C 2805) [Applicable wire size: 0.3 to 1.25 mm²] • V2-MS3, RAP2-3SL, TGV2-3N [Applicable wire size: 1.25 to 2.0 mm²] 		

External dimensions

AJ65SBTB3-16D5
AJ65SBTB1-32D5
AJ65SBTB32-16DR



*This is a diagram of AJ65SBTB3-16D5. Dimensions of AJ65SBTB1-32D5 and AJ65SBTB32-16DR are the same as above.

Product list

Product name	Model	Model code
AJ65SBTB3-16D5 Terminal block 3-wire type, 5 V DC input, positive/negative common (sink/source) 16 points	AJ65SBTB3-16D5	1W5454
AJ65SBTB1-32D5 Terminal block 1-wire type, 5 V DC input, positive/negative common (sink/source) 32 points	AJ65SBTB1-32D5	1W5455
AJ65SBTB32-16DR Terminal block 3-wire type, 24 V DC input, positive/negative common (sink/source) 8 point Terminal block 2-wire type, relay output, 2A, 8 points	AJ65SBTB32-16DR	1W5456

Manual

Manual name	Manual supply status	IB/SH No.	Model code
AJ65SBTB3-16D5 CC-Link System Compact Type Remote I/O Module User's Manual	Included	IB-0800368-A or later	13JY14
AJ65SBTB1-32D5 CC-Link System Compact Type Remote I/O Module User's Manual	Included	IB-0800369-A or later	13JY15
AJ65SBTB32-16DR CC-Link System Compact Type Remote I/O Module User's Manual	Included	IB-0800370-A or later	13JY16
CC-Link System Compact Type Remote I/O Module User's Manual	Sold separately	SH-4007-U or later	13JL72

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Brazil	MELCO-TEC Rep. Com.e Assessoria Tecnica Ltda. Rua Correia Dias, 184, Edificio Paraiso Trade Center-8 andar Paraiso, Sao Paulo, SP Brazil	Tel: +55-11-5908-8331 Fax: +55-11-5574-5296	Korea	Mitsubishi Electric Automation Korea Co., Ltd. B1F, 2F, 1480-6, Deungchon-Dong, Kangseo-Ku, Seoul 157-200, Korea	Tel: +82-2-3660-9607 Fax: +82-2-3664-0475
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