



2000 No.129E

NEW PRODUCT RELEASE

CC-Link

GENERAL-PURPOSE
PROGRAMMABLE LOGIC CONTROLLERS

Analog - Digital Converter Module type AJ65SBT-64AD

Digital - Analog Converter Module type AJ65SBT-62DA

New!

The CC-Link analog-digital converter module and digital-analog converter module, with the performance and functions of the conventional product (AJ65BT-64AD, AJ65BT-64DAV/DAI) incorporated in advanced means, is now available in an inexpensive compact size.

CC-Link master/local module
(Master station)

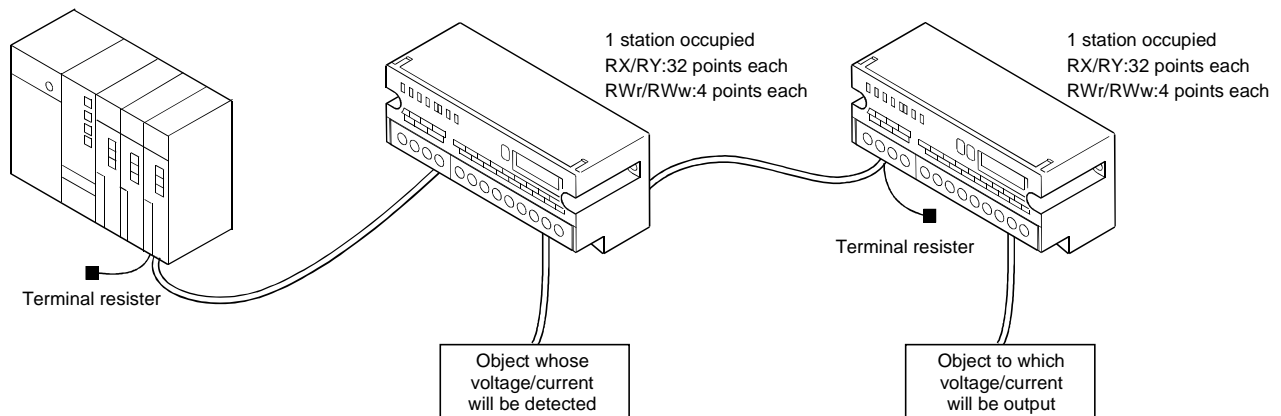
(QJ61BT11,AJ61BT11,A1SJ61BT11,
AJ61QBT11,A1SJ61QBT11)

AJ65SBT-64AD

(Remote device station)

AJ65SBT-62DA

(Remote device station)



[Features]

(1) High accuracy

The AJ65SBT-64AD carries out A/D conversion with a $\pm 0.2\%$ accuracy in respect to the maximum digital output value at the working ambient temperature $25 \pm 5^\circ\text{C}$.

The AJ65SBT-62DA carries out D/A conversion with a $\pm 0.2\%$ accuracy in respect to the maximum analog output value at the working ambient temperature $25 \pm 5^\circ\text{C}$.

(2) High resolution of $1/\pm 4000$

The resolution can be set to either $1/4000$ or $1/\pm 4000$ (-10 to $+10\text{V}$ range, when user range setting 1 is selected) can be selected and set with the range changeover.

(3) Range selectable per channel

There are five ranges* for the voltage and three ranges for the current, which can be selected for each channel. (The range refers to the types of offset and gain settings.)

(4) Smaller than conventional module

The installation area ratio is 60% smaller and the volume ratio is 38% smaller than the conventional module (AJ65BT-64AD, AJ65BT-64DAV/DAI).

(5) Up to 42 modules connectable

Although the conventional module occupied two stations, this new module occupies only one station, and up to 42 modules can be connected to one master station.

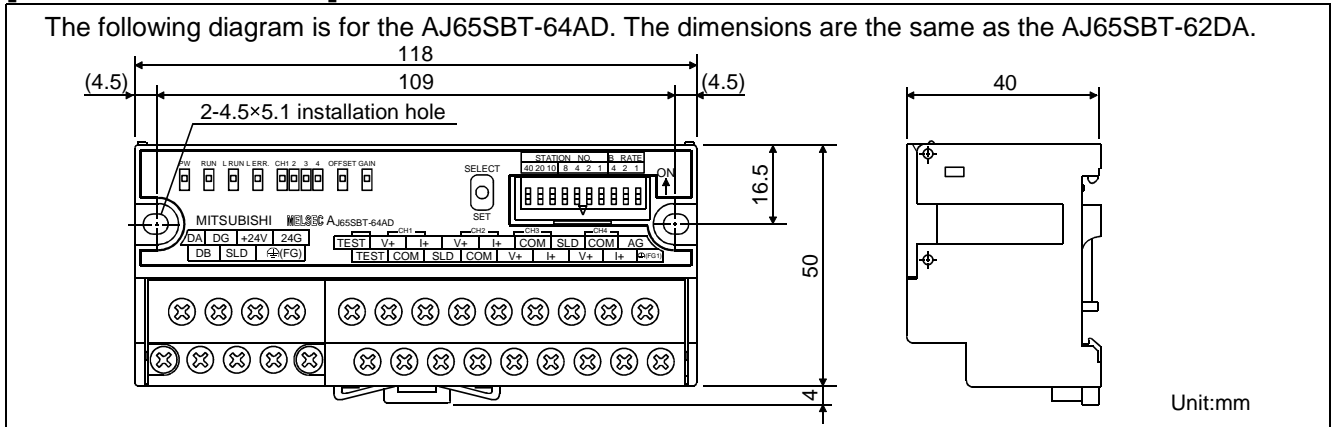
[AJ65SBT-64AD performance specifications]

Item		AJ65SBT-64AD				
Analog input	Voltage	DC -10 to 0 to +10V (input resistance 1MΩ)				
	Current	DC -20 to 0 to +20mA (input resistance 250Ω)				
Digital output		16-bit signed binary (-4096 to +4095)				
I/O characteristics, maximum resolution, accuracy (accuracy relative to maximum value of digital output value)	Voltage	Analog input range	Digital output	Accuracy		Max. Resolution
				Ambient temperature 0 to 55°C	Ambient temperature 25±5°C	
		-10 to +10V	-4000 to +4000	±0.4% (±16 digit*)	±0.2% (±8 digit*)	2.5mV
	User range setting 1 (-10 to +10V)					
		0 to 5V	0 to 4000			1.25mV
	User range setting 2 (0 to 5V)	1 to 5V				1.0mV
	Current		0 to 20mA	0 to 4000		5μA
			4 to 20mA			4μA
		User range setting 3 (0 to 20mA)				
	* : digit indicates digital value. Factory setting is -10 to +10V.					
Maximum conversion speed		1ms/1 channel.				
Absolute maximum input		Voltage ±15 V, current ±30mA				
Analog input points		4 channels/1module				
Number of occupied stations		1 station (RX/RX: each 32 points, RWr/RWw: each 4 points)				
Connected terminal block		7-point, 2-piece terminal block (transmission, power supply) Direct-coupled, 18-point terminal block (analog input section) (M3 screw)				
Applicable wire size		0.3 to 0.75mm ²				
Applicable crimping terminal		RAV1.25-3.5 (conforming to JIS C2805)				
Module mounting screw		M4 screw × 0.7mm × 16mm or more (tightening torque range: 78 to 108N•cm) Can also be mounted to DIN rail				
Supported DIN rail		TH35-7.5Fe, TH35-7.5Al (conforming to JIS-C2B12)				
External power supply		DC24V (DC20.4V to DC26.4V) Inrush current : 8.5A, within 2.3ms				
24VDC internal current consumption (A)		0.090				
Noise immunity		By noise simulator of 500Vp-p noise voltage, 1μs noise width and 25 to 60Hz noise frequency				
Dielectric withstand voltage		Between power supply/communication system batch and analog input batch: 500VAC, 1 minute				
Isolation system		Across communication system terminals and all analog input terminals: Photocoupler isolated Across power supply system terminals and all analog input terminals: Photocoupler isolated Across channels: Non-isolated				
Weight (kg)		0.20				
Outline dimensions (mm)		118 (W) × 50 (H) × 40 (D)				

[AJ65SBT-62DA performance specifications]

Item		AJ65SBT-62DA				
Digital input	Voltage	16-bit signed binary (-4096 to +4095)				
	Current	16-bit signed binary (0 to 4095)				
Analog output	Voltage	-10 to +10VDC (external load resistance: 2k Ω to 1M Ω)				
	Current	0 to 20mAADC (external load resistance: 0 to 600 Ω)				
I/O characteristics, maximum resolution, accuracy (accuracy relative to maximum value of analog output value)	Voltage	Digital Input Value	Analog Output Range	Accuracy		Max. Resolution
				Ambient temperature 0 to 55°C	Ambient temperature 25 \pm 5°C	
		-4000 to +4000	-10 to +10V	\pm 0.4% (\pm 40mV)	\pm 0.2% (\pm 20mV)	2.5mV
			User range setting 1 (-10 to +10V)			
		0 to 4000	0 to 5V	\pm 0.4% (\pm 20mV)	\pm 0.2% (\pm 10mV)	1.25mV
			1 to 5V			1.0mV
	User range setting 2 (0 to 5V)					
	Current	0 to 4000	0 to 20mA	\pm 0.4% (\pm 80 μ A)	\pm 0.2% (\pm 40 μ A)	5 μ A
			4 to 20mA			4 μ A
			User range setting 3 (0 to 20mA)			
Factory setting is -10 to +10V.						
Maximum conversion speed	1ms/1 channel					
Output short-circuit protection	Provided					
Absolute maximum output	Voltage: \pm 12V, Current: +21mA					
Number of analog output points	2 channels/1 module					
Number of occupied stations	1 station (RX/RX: 32 points each, RWr/RWw: 4 points each)					
Connected terminal block	7-point, 2-piece terminal block (transmission, power supply) Direct-coupled, 18-point terminal block (analog output section) (M3 screw)					
Applicable wire size	0.3 to 0.75mm ²					
Applicable crimping terminal	RAV1.25-3.5 (conforming to JIS C2805)					
Module mounting screw	M4 screw \times 0.7mm \times 16mm or more (tightening torque range: 78 to 108N \cdot cm) Can also be mounted to DIN rail					
Applicable DIN rail	TH35-7.5Fe, TH35-7.5Al (conforming to JIS-C2B12)					
24VDC internal current consumption (A)	0.16					
External power supply	DC24V (DC20.4V to DC26.4V)					
	Inrush current : 8.2A, within 2.1ms					
Noise immunity	By noise simulator of 500Vp-p noise voltage, 1 μ s noise width and 25 to 60Hz noise frequency					
Dielectric withstand voltage	500VAC for 1 minute across all power supply and communication system terminals and all analog output terminals					
Isolation system	Across communication system terminals and all analog output terminals: Photocoupler isolated Across power supply system terminals and all analog output terminals: Photocoupler isolated Across channels: Non-isolated					
Weight (kg)	0.20					
Outline dimensions (mm)	118 (W) \times 50 (H) \times 40 (D)					

[External Dimensions]



[Manuals]

Manual name	Manual shipment method	IB/SH No.	Type code
Analog-Digital Converter Module type AJ65SBT-64AD User's Manual(Hardware)	Enclosed with product	IB-0800138	13JT09
Analog-Digital Converter Module type AJ65SBT-64AD User's Manual	Sold separately	SH-080106	13JR18
Digital-Analog Converter Module type AJ65SBT-62DA User's Manual(Hardware)	Enclosed with product	IB-0800139	13JT10
Digital-Analog Converter Module type AJ65SBT-62DA User's Manual	Sold separately	SH-080107	13JR19

Country/Region

Sales office

Tel/Fax

U.S.A	Mitsubishi Electric Automation Inc. 500 Corporate Woods Parkway Vernon Hills, IL 60061	Tel : 1-847-478-2100 Fax : 1-847-478-0328
Brazil	MELCO-TEC Rep. Com.e Assessoria Tecnica Ltda. Av. Rio Branco, 123-15 ,and S/1507, Rio de Janeiro, RJ CEP 20040-005, Brazil	Tel : 55-21-221-8343 Fax : 55-21-221-9388
Germany	Mitsubishi Electric Europe B.V. German Branch Gothaer Strasse 8 D-40880 Ratingen, GERMANY	Tel : 49-2102-486-0 Fax : 49-2102-486-717
U.K	Mitsubishi Electric Europe B.V. UK Branch Travellers Lane, Hatfield, Herts., AL10 8XB,UK	Tel : 44-1707-276100 Fax : 44-1707-278695
Italy	Mitsubishi Electric Europe B.V. Italian Branch Centro Dir. Colleoni, Pal. Perseo - Ingr.2 Via Paracelso 12, 20041 Agrate B., Milano, Italy	Tel : 39-039-6053301 Fax : 39-039-6053206
Spain	Mitsubishi Electric Europe B.V. Spanish Branch Pol. Ind. "Can Magi"- C/.Joan Buscalla, 2-4-A.C.420 08190 Sant Cugat del Valles, Barcelona, Spain	Tel : 34-935-653135 Fax : 34-935-891579
South Africa	MSA Manufacturing (Pty) Ltd. P O Box 39733 Bramley 201 8 Johannesburg, South Africa	Tel : 27-11-444-8080 Fax : 27-11-444-8304
Hong Kong	Ryoden International Ltd. 10th Floor, Manulife Tower, 169 Electric Road, North Point, HongKong	Tel : 852-2887-8870 Fax : 852-2887-7984
China	Ryoden International Shanghai Ltd. 3F Block5 Building Automation Instrumentation Plaza 103 Cao Bao Rd. Shanghai 200233 China	Tel : 86-21-6475-3228 Fax : 86-21-6484-6996
Taiwan	Setsuyo Enterprise Co., Ltd. 6F., No.105 Wu-Kung 3rd.RD, Wu-Ku Hsiang, Taipei Hsine, Taiwan R.O.C.	Tel : 886-2-2299-2499 Fax : 886-2-2299-2509
Korea	STC Techno Seoul Co., Ltd. 1F Dong Seo Game Channel Bldg., 660-11,Deungchon-dong Kangsec-ku, Seoul, Korea	Tel : 82-2-3668-6567 Fax : 82-2-3664-8335
Singapore	Mitsubishi Electric Asia Pte, Ltd. 307 ALEXANDRA ROAD #05-01/02, MITSUBISHI ELECTRIC BUILDING SINGAPORE 159943	Tel : 65-473-2480 Fax : 65-476-7439
Thailand	F. A. Tech Co.,Ltd. 1138/33-34 Rama 3 Road, Yannawa, Bangkok 10120, Thailand	Tel : 66-2-295-2861 Fax : 66-2-295-2865
Indonesia	P.T. Autoteknindo SUMBER MAKMUR Kompleks Agung Sedayu Propertindo (Harco Mangga Dua) Blok H No.4 Jl Mangga Dua Raya Jakarta Pusat 10730-Indonesia.	Tel : 62-21-336292 Fax : 62-21-330378
India	Messung Systems Put,Ltd. Electronic Sadan NO:111 Unit No15, M.I.D.C BHOSARI,PUNE-411026	Tel : 91-20-7128927 Fax : 91-20-7128108
Australia	Mitsubishi Electric Australia Pty. Ltd. 348 Victoria Road, PostalBag, No 2, Rydalmere, N.S.W 2116, Australia	Tel : 61-2-9684-7777 Fax : 61-2-9684-7245



MITSUBISHI ELECTRIC CORPORATION
HEAD OFFICE:MITSUBISHI DENKI BLDG MARUNOUCHI TOKYO 100-8310 TELEX:J24532 CABLE MELCO TOKYO