W 11 × H 22 mm 7-segment Display Units

D1SA Series

CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Features

- Selectable decimal (0 to 9)/hexadecimal (0 to 9, A to F) display, input logic (positive / negative), data input method (serial / parallel)
- 7-segment, red / green display
- 12 - 24 VDC⎓ power supply
- Wide range on signal input voltage level (Low: max. 0 - 1.2 VDC⎓, High: 4.5 - 24 VDC⎓)
- Easy multi-stages connection
- Zero Blanking function

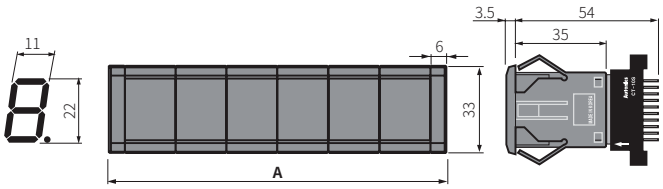
Specifications

Model	D1SA-RN	D1SA-GN
Display method	7-segment LED (red)	7-segment LED (green)
Power supply	12 - 24 VDC⎓	
Allowable voltage range	90 to 110 % of power supply	
Current consumption	≤ 35 mA	
Size	W 11 × H 22 mm	
Display character	Decimal number: 0 to 9, decimal point Hexadecimal number: 0 to 9, A to F, decimal point	
Input	Parallel: Parallel 4-bit data, LATCH, Zero Blanking, decimal point Serial: Serial 4 / 5-bit data, CLOCK, Zero Blanking, LATCH, decimal point [01]	
Input resistance	20 kΩ	
Input level	High: 4.5 - 24 VDC⎓, Low: 0 - 1.2 VDC⎓	
Max. Cock [02]	≤ 3 kHz	
Output	Data output (serial input), Zero Blanking output	
Input logic	Positive logic (PNP), negative logic (NPN) selectable (function set switches)	
Noise immunity	Between power terminals or input terminals : ± 300 V the square wave noise (pulse width: 1 μs) by the noise simulator	
Ambient temperature	0 to 60 °C, storage: -10 to 85 °C (no freezing or condensation)	
Ambient humidity	35 to 85 %RH (no freezing or condensation)	
Accessory	Connector (CT-10S)	
Approval	EAC	
Weight (packaged) [03]	≈ 16 g (≈ 131 g)	

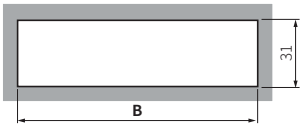
01) When applying the serial 4-bit input.
02) Max. Clock is for 50 : 50 (%) of duty ratio (ON, OFF ratio).
03) The package weight is based on four.

Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.

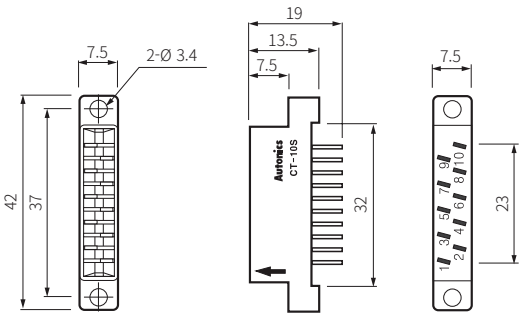


■ Panel cut-out

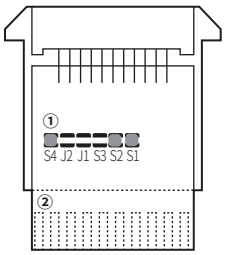


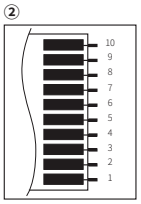
Digit (N)	Size A (20×N+12)	Size B (20×N+10)
1	32	30 ± 0.1
2	52	50 ± 0.1
3	72	70 ± 0.1
4	92	90 ± 0.1
5	112	110 ± 0.1
6	132	130 ± 0.1
7	152	150 ± 0.1
8	172	170 ± 0.1

■ Connector (CT-10S)



Unit Descriptions





① Function set switches

• Open ⫟: OFF / Short ⫿: ON

No.	ON	OFF	Function	Default
S1	Decimal number	Hexadecimal number	Display characters	ON
S2	Parallel	Serial	Input	ON
S3	5 bits	4 bits	Select serial input	OFF
J1	Use	Not used	Serial data output 01)	OFF
J2	Use	Not used	Zero Blanking	OFF
S4	Negative logic (NPN)	Positive logic (PNP)	Input logic	ON

01) Set as ON in serial input, as OFF in parallel input.

② I/O terminal

Input / Terminal	Parallel input		Serial input	
	Code	**Function**	**Code**	**Function**
1	V+	12 - 24 VDC ⎓	VCC	12 - 24 VDC ⎓
2	D0	Data input	N·C	-
3	D1		CK	Clock input
4	D2		DI	Data input
5	D3		DO	Data output
6	BI	Zero Blanking input	BI	Zero Blanking input
7	BO	Zero Blanking output	BO	Zero Blanking output
8	LE	LATCH input	LE	LATCH input
9	DP	Decimal point input	DP	Decimal point input
10	GND	0 V	GND	0 V

Sold Separately

• Caps: DAR (L)-R (1 set - left and right, D1SA-RN dedicated)
• Caps: DAR (L)-BL (1 set - left and right, D1SA-GN dedicated)

Sold Separately: Caps (DAR(L)-□)

• Unit: mm, For the detailed drawings, follow the Autonics website.

• D1SA-RN: DAR(L)-R (left-right)
• D1SA-GN: DAR(L)-BL (left-right)
• Caps are sold as an one set (left-right).