

# W 32 × H 57 mm 7-segment Display Units



## D1SC-N 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)
- 12 - 24 VDC≐ power supply
- Wide range on signal input voltage level (Low : max. 0 - 1.2 VDC≐, High: 4.5 - 24 VDC≐)
- Zero Blanking function

### Product Components

- Product × 1
- Instruction manual × 1
- Connector × 1
- Housing [5264-10] × 1
- Terminal [5263 (PBT)] × 1
- Sub-PCB for multi-stage connection × 1

### Specifications

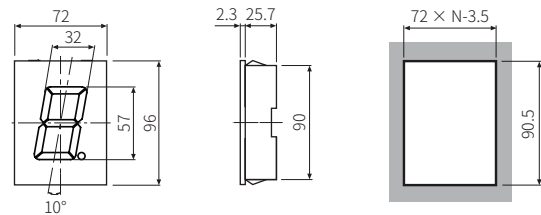
Model	D1SC-N
Display method	7-segment LED (red)
Power supply	12 - 24 VDC≐
Allowable voltage range	90 to 110 % of power supply
Current consumption	≤ 70 mA
Character size (W×H)	32 × 57 mm
Display character	Decimal number: 0 to 9, decimal point, Minus Hexadecimal number: 0 to 9, A to F, decimal point, Minus
Input method	Parallel: Parallel 4-bit data, LATCH, Zero Blanking, decimal point Serial : Serial 4/5-bit data, CLOCK, Zero Blanking, LATCH, decimal point <sup>01)</sup>
Input resistance	12 kΩ
Input level	High: 4.5 - 24 VDC≐, Low: 0 - 1.2 VDC≐
Max. Clock <sup>02)</sup>	≤ 3 kHz
Output	Data output (serial input), Zero Blanking output
Input logic	Positive logic (PNP), negative logic (NPN) selectable (function set switches)
Insulation resistance	≥ 100 MΩ (500 VDC≐ megger)
Noise immunity	Between the 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)
Approval	ERC
Weight	≈ 100 g

01) When applying the serial 4-bit input.

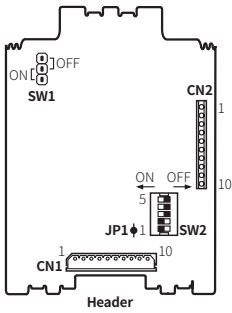
02) Max. Clock is for 50 : 50 (%) of duty ratio (ON, OFF ratio).

### Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.
- N: number of units, panel thickness: 2 to 4 mm



## Unit Descriptions



### ■ CN1 connector spec.

- Manufacturer: MOREX CO.,LTD. (Korea)
- Housing: 5264-10
- Header: 5264-10A (Straight)
- Terminal: 5263 (PBT)

### ■ Cable spec.

- AWG22 to 28 (cable diameter:  $\leq \varnothing 1.9$  mm)
- Shedding length of wire cover: 2.4 to 2.9 mm

### ■ CN2 connector spec.

- Use with the auxiliary PCB (W8 × H27 mm) for connecting multi-stage.
- 1:1 correspondence with CN1 terminal

### ■ I/O terminal (CN1, CN2)

Terminal	Input		Serial input		
	Code	Function	Code	Function	
1	V+	12 - 24 VDC	VCC	12 - 24 VDC	
2	A	$2^0$	Data input	N·C	
3	B	$2^1$		CK	CLOCK input
4	C	$2^2$		DI	Data input
5	D	$2^3$		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	

### ■ Function set jumper (SW1) / Function set switches (SW2, JP1)

No.	ON	OFF	Function	Default	
SW1	Negative logic (NPN)	Positive logic (PNP)	Input logic	ON	
SW2	1	Decimal number	Hexadecimal number	Display characters	ON
	2	Parallel	Serial	Input	ON
	3	5-bit	4-bit	Select serial input	OFF
	4	Use	Not used	Serial data output <sup>01)</sup>	OFF
	5	Use	Not used	Zero Blanking	OFF
JP1	7-segment display	Minus display	Minus display	ON	

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