



# DMC10S

DigitroniK

## Distributed Multi-Channel Controller

The DigitroniK DMC10S is a modular 2- or 4-channel compact digital controller. Input is full multiple, supporting thermocouple, RTD, DC voltage and DC current inputs.

Connectors are used to link modules, so wiring for communications and power is not required. "Quick-FITTER Control", a high-speed recovery control function is provided as standard. This function enables quick recovery of setpoint temperature and overshoot suppression at the occurrence of disturbances.



DIGITAL CONTROLLERS

### Specifications

Model No.	DMC10S2T	DMC10S2C	DMC10S4C
No. of control channels	2	2	4
Wiring method with external device	Terminal	Connector	Connector
PV input	Input type		
	Thermocouple, RTD, DC voltage and DC current		
	Indication accuracy		
	±0.5% FS ± 1 digit (under standard conditions)		
Control output	Sampling cycle		0.5s
	Setting method		
	By a dedicated PC loader (SLP-D10J20) or communications program		
Event output	Type of control output		Relay output
	Control action		Time proportional PID or ON/OFF
	No. of PID groups		1 group/channel
Remote switch input	No. of inputs		4 (model with external contact input) 4 (input from internal bus)
	Operation types		
SP selection, RUN/READY changeover, AUTO/MANUAL changeover, auto-tuning start/stop, self-tuning operation, timer event start trigger, event output latch cancellation			
Current transformer inputs			
2			
Communications			
RS-485 (3-wire type)			
General	Power		
	24Vdc		
	Power consumption		
	5W max. (under standard conditions)		
Standards compliance			
CE: EN61010-1, EN61326			
cUL: File No. E246616			
Mass			
200g			

### Selection Guide

I II III IV V VI VII Example: DMC10S2TR100

Segment	Model No. selection	Description
I	Basic No.	DMC10 ↓ ↓
II	Type	S ○ ○
III	No. of channels	2 ○ –
IV	Wiring method	4 – ○
		T ○ ○
V	Control output	C ○ ○
		R ○ ○
VI	Option 1	V ○ ○
		00 – ○
		01 ○ –
		02 ○ –
		03 ○ –
		04 ○ –
VII	Option 2	00 ○ ○
		D0 ○ ○
		Y0 ○ ○

\* A circle (○) denotes availability.

### Accessories (sold separately)

Model No.	Description
SLP-D10J50	Smart Loader Package

## Input Types and Ranges

### • Thermocouple

Range code	Input type	Range (°C)
01	K:CA	0 to 1200
02	K:CA	0 to 600
03	K:CA	0 to 400
04	K:CA	-200 to +400
05	J:IC	0 to 800
06	J:IC	-200 to +400
07	E:CRC	0 to 600

Range code	Input type	Range (°C)
08	T:CC	-200 to +400
09	DIN U	-200 to +400
10	DIN L	0 to 800
11	R	0 to 1600
12	S	0 to 1600
13	PLII	0 to 1200
14	B	0 to 1800

### • RTD

Range code	Input type	Range (°C)
21	Pt100	-200 to +500
22	Pt100	0 to 200
23	Pt100	-50 to +100
24	JPt100	-200 to +500
25	JPt100	0 to 200
26	JPt100	-50 to +100
27	Pt100	-100 to +300

Range code	Input type	Range (°C)
28	JPt100	-100 to +300
29	Pt100	-50 to +150
30	JPt100	-50 to +150
31	Pt100	-75 to +175
32	JPt100	-75 to +175
33	Pt100	-100 to +200
34	JPt100	-100 to +200

### • DC current/voltage

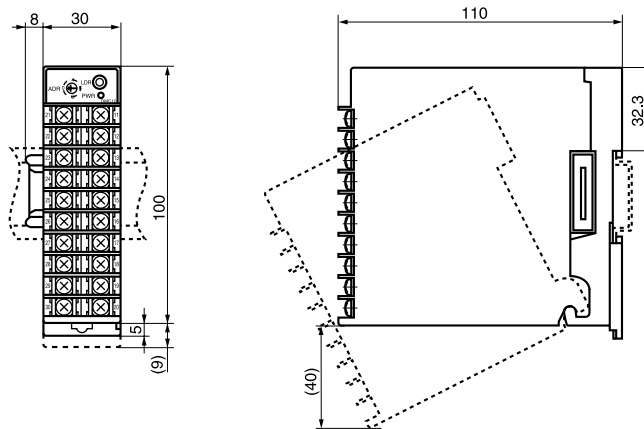
Range code	Input type	Range (programmable)
41	4 to 20mA	-2000 to +10000
42	1 to 5V	-2000 to +10000

Range code	Input type	Range (programmable)
43	0 to 5V	-2000 to +10000
44	0 to 1V	-2000 to +10000

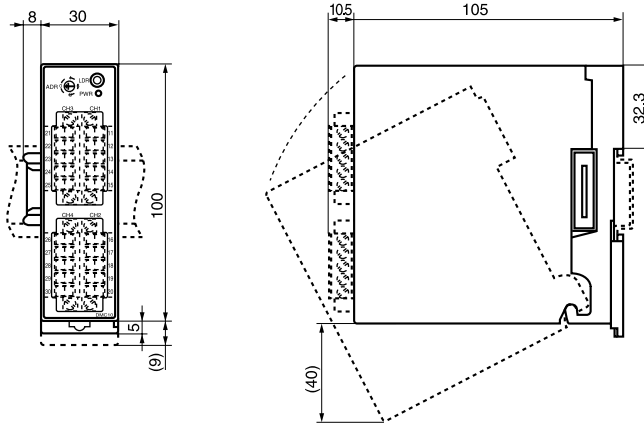
## Dimensions

(Unit: mm)

### • Terminal model DIN rail mounting



### • Connector model DIN rail mounting



### • Screw mounting

