

**SDU10 Compact Operation Unit for DMC10**

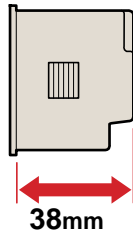
# SDU10

## Remote SP setting and operation monitoring for the DMC10 controllers

**Compact 48x48mm size and up to 15 units of the DMC10 (60 channels) connectable DMC10 indication/setting functions with host communication function**

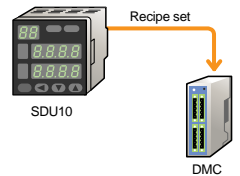
### Space saving

- Compact 48x48mm panel display
- Only 38mm depth
- Effective for installation in a limited space of equipment



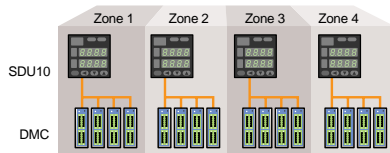
### Each recipe set settable and transmittable

- Each recipe set can be transmitted to the DMC10.
- This function is convenient for applications where frequent change of SP or PID is required.



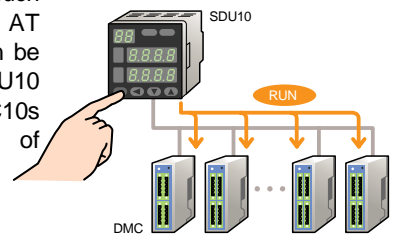
### Distributed layout

- Distributed layout effective for independent indication and setting of each zone
- This eliminates the troublesome physical movement for operation.



### Direction simultaneously transmittable to all of the connected DMC10s

Operation demands such as RUN/READY, AT (auto-tuning), etc. can be directed from the SDU10 to all connected DMC10s by a single touch of display button.

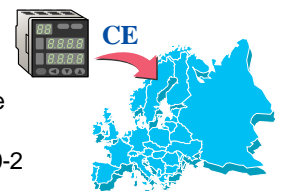


### Host communication function

- Maximum 15 units of the DMC10 can be connected to a single SDU10 by RS-485.
- More than 16 units of the DMC10 can be connected if the SDU10 units are installed between PLC (host device) and the DMC10 controllers.

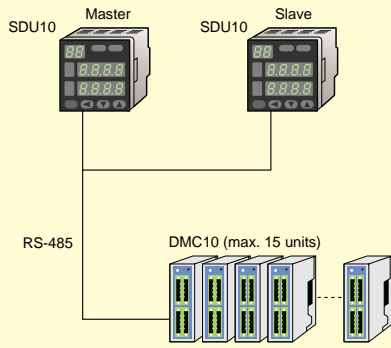
### CE marking

The SDU10 is conforming to the following standards:  
EN50081-2, EN50082-2, EN61010-2

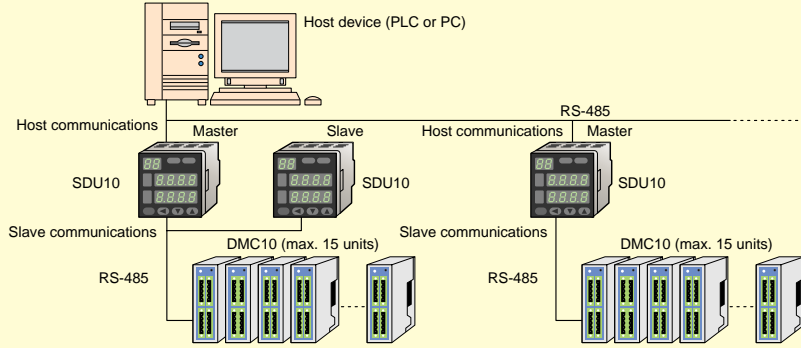


# System Configuration

## Application example 1 (without host device)



## Application example 2 (with host device)

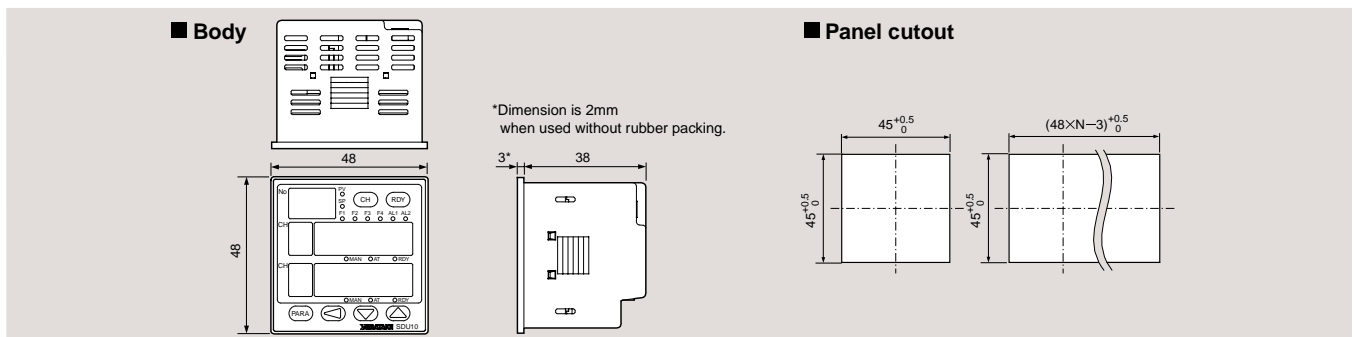


## Specifications

Item		Specifications	
<b>General Specifications</b>			
<b>Model No.</b>		<b>SDU10T0100</b>	
Memory backup		Nonvolatile semiconductor memory	
Rated power supply voltage		24Vdc	
Power consumption		Max. 3W	
Insulation resistance		Between power and secondary terminals: 20MΩ Min. (by 500V megger)	
Dielectric strength		Between power and secondary terminals: 500Vac for 1 min	
Inrush current at power ON		Max. 10A	
Isolation		<ul style="list-style-type: none"> <li>•Between power circuit and secondary circuit</li> <li>•Between host communications and slave communications</li> <li>•Non-isolation between slave communications and RSW/EVENT</li> </ul>	
Operating conditions	Ambient temperature	0 to 50°C	
	Ambient humidity	10 to 90%RH	
	Power supply voltage	21.6 to 26.4Vdc	
	Vibration resistance	0 to 2m/s <sup>2</sup>	
	Shock resistance	0 to 10m/s <sup>2</sup>	
Storage/transportation	Ambient temperature	-20 to +70°C	
	Ambient humidity	10 to 90%RH	
	Package drop	60cm	
Weight		Max. 200g	
Terminal screw tightening torque		Max. 0.25N·m	
Conformed standard		EN50081-2, EN50082-2, IP60	
<b>Additional functions</b>	External switch input	No. of points	8 (two of which are shared with events)
		Functions	<ul style="list-style-type: none"> <li>•RUN/READY changeover, AT start/stop</li> <li>•Recipe set changeover, event latch cancellation</li> </ul>
		Allowable ON contact resistance	Max. 250Ω
		Allowable OFF contact resistance	Min. 100KΩ
		Allowable ON residual voltage	Max. 1V
		Open terminal voltage	5Vdc
		ON terminal current	Approx. 4mA
	Event output	No. of points	2 (shared use with external switch input)
		Functions	<ul style="list-style-type: none"> <li>•At error lamp ON, at READY (either 1ch)</li> <li>•At AT execution (either 1 ch)</li> <li>•At multiple events ON for the DMC (AND theory)</li> </ul>
		Output type	Open collector
	Host/slave communications	Output rating	30Vdc, max. 70mA
		Signal level	RS-485 compliant
		Transmission path connection	Multi-point (Host: Max. 31 units, Slave: Max. 15 units of DMC10)
Communication system		Half duplex, asynchronous	
	Max. line length	Max. 500m	
	Terminator	External terminator must not be attached as equivalent terminating resistance is built in.	

## Dimensions

(Unit:mm)



**YAMATAKE**

Specifications are subject to change without notice.

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