# DMC-G/H

# Connectable to PLC for DeviceNet

This device is 8bit/16bit optical data transmission device which is able to connect to PLC for DeviceNet.

- 8 bits type DMC-GB/HB is able to communicate with parallel type, DMS-GB/HB and DMG-GB/HB.
  16 bits type DMC-GC/HC is able to communicate with parallel type, DMH-GC/HC.
- •Connector system.
- Max. 63 pcs can be connected to 1 master unit.



# Specifications

Туре		Parallel type				
Model No.		DMC-GB1	D	MC-HB1	DMC-GC1	
Power source		24VDC (15%, -10%, Ripple 0.5Vp-p or less)				
Current consumption		PLC: 40mA or less, Equipment: 50mA or less (at 24VDC)			PLC: 50mA or less, Equipment: 100mA or less (at 24VDC)	
Transmission capacity		Input 8 points/ output 8 points (Selected by dip switch • GO transmission is available)			Input 16 points/output 16 points	
Address setting		Each setting by dip switch				
•	Direction	Head-on	Side-on		Head-on	
ŏn	Transmission distance	0.6m			0 to 3m (set by adjuster)	
Щ р	Directional angle	Total 30°				
Optical communication	Transmission method	Half duplex two-way transmission				
cat	Transmission time	40msec	15msec			
lör	Modulation method	Pulse modulation			FSK modulation	
-	Detection method	Parity check bit-reverse comparing sys				
	Connection type	Mult-drop type				
	Communication speed	500kbit/ 250kbit/ 125kbit/sec (Changeover by switch)				
0	Communication cycle time	12.2ms (Connection Nos. 32 pcs at communication speed, 500kbit/s)				
ev.	Communication media	Exclusive cable 5-wire (Signal 2, power 2, shield 1)				
DeviceNet	Communication distance	Max.network length: 10 Feeder line: 6m	Okbit/sec, Om or less, n or less, m or less,	250kbit/sec, 250m or less, 6m or less, 78m or less,	125kbit/sec 500m or less 6m or less 156m or less	
	Max. Nos.of connection node	64 pcs (including master unit, max. connetable slave 63 pcs)				
Connection		Connector: 5 pins for PLC, 2 pins (for other power source)				
Ambient illuminance		4,000lux or less (Both halogen and incandescent lamp)				
Ambient temperature		-10 to +50 °C				
Ambient humidity		85%RH or less (not icing, not condensing)				
Vibration resistance		Double amplitude 1.5mm, 10 to 55Hz, each 2 hour in X, Y and Z directions				
Impact resistance		490m/s <sup>2</sup> , each 10 time in X, Y and Z directions				
Case	material	ABS resin				
weig	ht	Approx. 110g				

# Connection



### 5P side (PLC)

Colors	Signals	Functions	Position			
Red	+24V	Power	1			
White	Can+	Signal	2			
Shield	Shield		3			
Blue	Can-	Signal	4			
Black	+0V	Power	5			

# 2P side (Equipment power source)

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Colors	Signals	Functions	Position
	+24V	Power	1
	+0V	Power	2

Note) Make a wiring not to be affected by noise or surge and also, don't make a wiring with main circuit and high voltage line.

# External dimensions



# DMM-G/H

# Direct connection to CC-Link

This device, 8bit/16bit parallel type is able to connect directly to CC-Link system.

- •8 bits type DMM-GB/HB is able to communicate with parallel type, DMS-GB/HB and DMG-GB/HB.
- 16 bits type DMM-GC/HC is able to communicate with parallel type, DMH-GC/HC.
- It is possible to connect maximum 64 units to one master unit.



# Specifications

Туре		Parallel type						
Model No.		DMM-GB1	DMM-HB1		DMM-GC	1	DM	M-HC1
Direction		Head-on	Side-on	Head-	on	Side-on		
Power source/Current consumption		24VDC (18 to 30VDC ava	ilable), 70mA or less (at	: 24V)				
Optical communication	Transmission distance	0 to 1m (set by adjuster)		0 to 3r	n (set by a	adjuster)		
	Directional angle	Total 30°			26°			
	Transmission capacity	8BIT/ 8BIT 16BIT/16BIT or 15BIT/15BIT*1			IT*1			
	Transmission method	Half duplex two-way transmission						
	Transmission time	Approx. 40msec						
	Modulation method	Pulse modulation	Pulse modulation FSK modulation					
	Detection method	Parity check						
	Communication speed	10Mbps/ 5Mbps/ 2.5Mbps/ 625kbps/ 156kbps (Changeover by switch)						
	Transmission path	RS-485 bus						
_	Remote station No.	1 to 64						
CC-Link	Occupied station	1 station						
Ė.	Connecting cable	CC-Link exclusive cable, CC-Link High-performance exclusive cable						
¥	Total extension distance <sup>*2</sup>	When using exclusive cable:		10Mbps, 100m, 100m,	5Mbps, 150m, 160m,	2.5Mbps, 200m, 400m,	625kbps, 600m, 900m,	156kbps 1,200m 1,200m
	Connection	Connector type (5 pins)						
Ambient illuminance		4,000lux or less (Both halogen and incandescent lamp)						
Ambient temperature		-10 to +50°C						
Ambient humidity		85%RH or less (not icing, not condensing)						
Vibration resistance		Double amplitude 1.5mm, 10 to 55Hz, each 2 hour in X, Y and Z directions						
Impa	ct resistance	490m/s <sup>2</sup> , each 10 time in X, Y and Z directions						
Case	material	Cover: Polycarbonate, base/cable cover: ABS resin						
weight		Approx. 110g						

\*1. 16th bit can be changed to Select inuput/GO output by input changeover switch.

\*2. Total extended distance changes depending on total remote numbers and min. cable length between remote stataions.

# Connection



# 5P side (CC-Link)

Signals	Functions	Position
DA	Signal cable	1
DAR	Terminator provided	2
DB	Signal cable	3
DG	Signal GND cable	4
SLD	Shield	5

#### 3P side (Equipment power source)

Signals	Functions	Position
FG	Earth	1
+24V	Power	2
+0V	Power	3

Note) Don't make a wiring with main circuit, high-voltage line or load wire because it is not affected by noise and surge induction.

# External dimensions

