

CL2X16-D1MJ1V
CL2Y16-TP1MJ1V

CC-Link/LT Remote I/O Module

New MIL connector type 16-point I/O module can supply I/O power from module power supply!

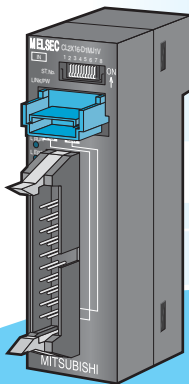
Features

Reduced cost and space requirement

Capable of supplying 24 V DC from the CC-Link/LT interface connector to an external device via the MIL connector. An external power supply is no longer required for I/O power supply, reducing the cost and space requirement.

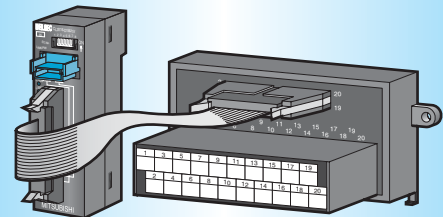
Minimized wiring

The I/O power can be supplied from the CC-Link/LT interface connector, cutting down wiring for an external power supply.

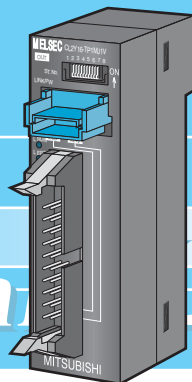


24 V DC 16-point input module
CL2X16-D1MJ1V

CC-Link/LT



*The above drawing shows an example of connecting CL2X16-D1MJ1V to a terminal block with a connector.



24 V DC 16-point output module
CL2Y16-TP1MJ1V

CC-Link/LT

Mitsubishi Electric Corporation Nagoya Works is a factory certified for ISO14001 (standards for environmental management systems) and ISO9001 (standards for quality assurance management systems)

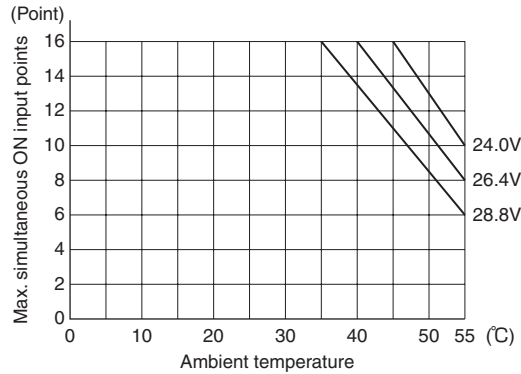


CL2X16-D1MJ1V

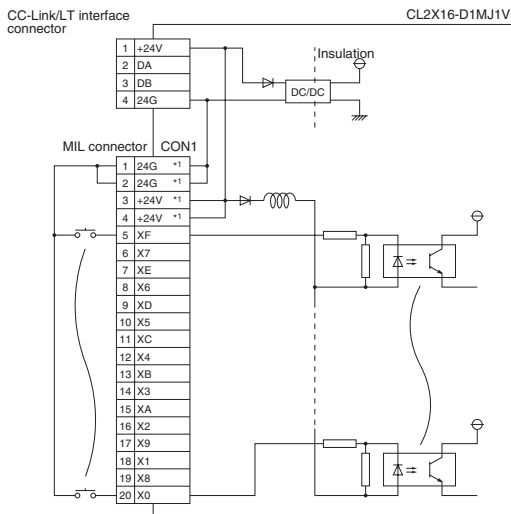
Performance specifications

Item		CL2X16-D1MJ1V	
Number of input points		16 points	
Isolation method		Photocoupler	
Rated input voltage		24 V DC (same as module power supply)	
Rated input current		Approx. 4 mA	
Operating voltage range		Same as module power supply	
Input derating		Refer to the derating chart	
ON voltage/ON current		19 V or higher/3 mA or higher	
OFF voltage/OFF current		11 V or lower/1.7 mA or lower	
Input resistance		5.6 kΩ	
Response time	Response time setting	0.5 ms (high speed response type)	1.5 ms (standard type)
	OFF to ON	TYP.	0.05 ms
		MAX.	0.1 ms
	ON to OFF	TYP.	0.2 ms
MAX.		0.5 ms	
Wiring method for common		16 points/common (2 points) (MIL connector 1-wire type)	
Input type		Positive common (sink)	
Number of stations occupied		4-point mode: 4 stations, 8-point mode: 2 stations, 16-point mode: 1 station	
Maximum allowable current for I/O power supply		1.0 A or lower/common	
Module power supply	Voltage	20.4 to 28.8 V DC (ripple ratio: within 5%)	
	Current consumption	45 mA or lower (at 24 V DC, all points ON)	
	Current at startup	70 mA or lower (at 24 V DC)	
Noise immunity		By noise simulator of 500 Vp-p noise voltage, 1μs pulse width, and 25 to 60 Hz noise frequency Fast transient/burst noise IEC61000-4-4: 2 kV	
Dielectric withstand voltage		Between primary (all DC external terminals) and secondary (internal circuit): 500 V AC for 1 minute	
Insulation method		Between primary (all DC external terminals) and secondary(internal circuit): 10 MΩ or more by 500 V DC insulation resistance tester	
Degree of protection		IP2X	
Weight		0.05 kg	
External connections for I/O		20-pin MIL connector	
Module mounting method		DIN rail, can be mounted in 6 different directions	

Derating chart



Wiring



*1: Do not externally supply power to the power supply pins.

Comparison with previous model

	CL2X16-D1MJ1V	Previous model CL2X16-D1M1V
Features	No external power supply is required for I/O power supply. The cost, space requirement, and wiring time can be reduced.	Current consumption of a connected device can be supplied from an external power supply. Also, module power supply and I/O power supply can be isolated.
Specifications	Input power supply	Supplied from the CC-Link/LT interface connector.
	Rated input voltage	24 V DC (same as module power supply)
	Operating voltage range	Same as module power supply
		Supplied from an external power supply via the MIL connector
		24 V DC
		N/A

*Because the input power is supplied from the CC-Link/LT interface connector in the new model, the wiring is not compatible with the previous model.

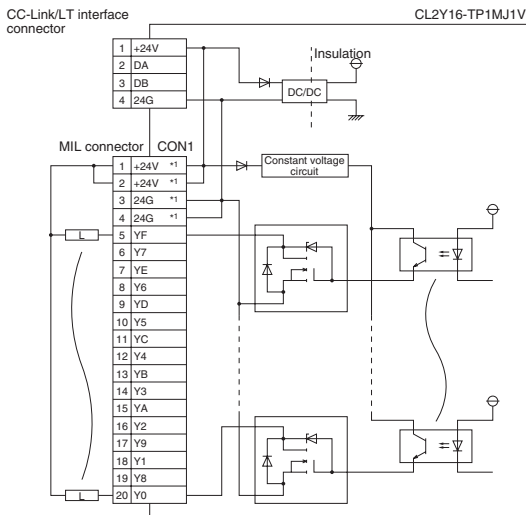
CL2Y16-TP1MJ1V

Performance specifications

Item		CL2Y16-TP1MJ1V
Number of output points		16 points
Isolation method		Photocoupler
Rated load voltage		24 V DC (same as module power supply)
Operating load voltage range		Same as module power supply
Maximum load current		0.1 A/point, 1.6 A/common
Maximum inrush current		0.7 A, 10 ms or less
Leakage current at OFF		0.1 mA or lower
Maximum voltage drop at ON		0.3 V or lower (TYP.) at 0.1 A, 0.6 V or lower (MAX.) at 0.1 A
Output type		Sink
Protection function		Overload protection function, overheat protection function
Response time	OFF to ON	0.5 ms or less
	ON to OFF	0.5 ms or less (resistive load)
Surge suppressor		Zener diode
Wiring method for common		16 points/common (2 points) (MIL connector 1-wire type)
Number of stations occupied		4-point mode: 4 stations, 8-point mode: 2 stations, 16-point mode: 1 station
Module power supply*1	Voltage	20.4 to 28.8 V DC (ripple ratio: within 5%)
	Current consumption	55 mA or lower (at 24 V DC, all points ON), not including external load current
	Current at startup	70 mA or lower (at 24 V DC)
Noise immunity		By noise simulator of 500 Vp-p noise voltage, 1μs pulse width, and 25 to 60 Hz noise frequency Fast transient/burst noise IEC61000-4-4: 2 kV
Dielectric withstand voltage		Between primary (all DC external terminals) and secondary (internal circuit): 500 V AC for 1 minute
Insulation method		Between primary (all DC external terminals) and secondary (internal circuit): 10 MΩ or more by 500 V DC insulation resistance tester
Degree of protection		IP2X
Weight		0.05 kg
External connections for I/O		20-pin MIL connector
Module mounting method		DIN rail, can be mounted in 6 different directions

*1: The load power supply is supplied from the module power supply.

Wiring



*1: Do not externally supply power to the power supply pins.

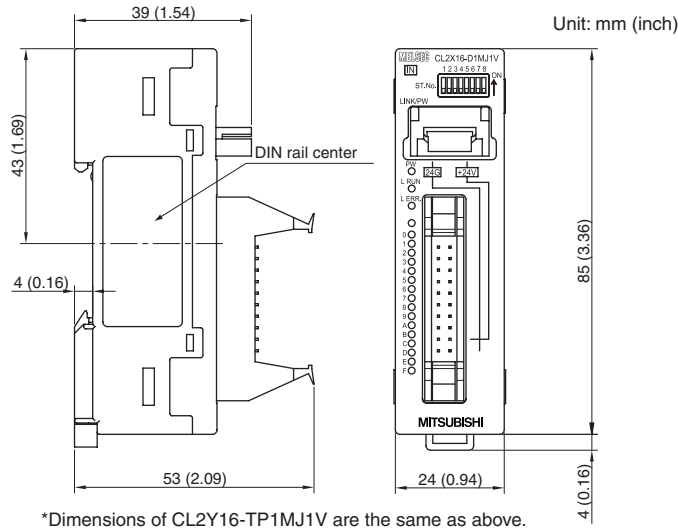
Comparison with previous model

		CL2Y16-TP1MJ1V	Previous model CL2Y16-TP1M1V
Features		No external power supply is required for I/O power supply. The cost, space requirement, and wiring time can be reduced.	Current consumption of a connected device can be supplied from an external power supply. Also, load voltage can be selected from 12/24 V DC.
	Output power supply	Supplied from the CC-Link/LT interface connector.	Supplied from an external power supply via the MIL connector. 10.2 to 28.8 V DC (ripple ratio: within 5%)
Specifications	Rated load voltage	24 V DC (same as module power supply)	12/24 V DC
	Operating load voltage range	Same as module power supply	10.2 to 28.8 V DC (ripple ratio: within 5%)
	Module power supply (current consumption)	55 mA or lower (at 24 V DC, all points ON)	50 mA or lower (at 24 V DC, all points ON)

*Because the output power is supplied from the CC-Link/LT interface connector in the new model, the wiring is not compatible with the previous model.

External dimensions

CL2X16-D1MJ1V CL2Y16-TP1MJ1V



Product list

Product name	Model	Model code
MIL connector type 16-point input module (I/O power supplied from module power supply)	CL2X16-D1MJ1V	1WL018
MIL connector type 16-point output module (I/O power supplied from module power supply)	CL2Y16-TP1MJ1V	1WL019

Manuals

Manual name	Manual supply status	IB/SH No.	Model code
CL2X16-D1MJ1V CC-Link/LT Remote I/O Module User's Manual	Included	IB-0800392-A or later	13JY39
CL2Y16-TP1MJ1V CC-Link/LT Remote I/O Module User's Manual	Included	IB-0800393-A or later	13JY40

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