



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Digital I/O Slave Units with MIL Connector (Vertical type)

CRT1-VID16ML(-1)/VOD16ML(-1)

Thinnest in the industry!

Ultimately little space and wiring are required.

MIL connectors expand I/O interface options to include direct connection to actuators and to terminal block conversion units.

- Super thin width of 15 mm could downsize the control panel.
- Connector interface between the communications unit and the I/O units can reduce start-up time and raise maintenance ability.
- Various maintenance data such as operation status and deterioration of equipment can be collected to improve productivity.
- DIN tracks and metal fixtures allow flexible installation.
- Wide range of connection styles are available including direct connection to actuators and to terminal block conversion units.



Ordering Information

Name	Specifications			Model
MIL Connector *	Inputs	16 inputs	NPN	CRT1-VID16ML
			PNP	CRT1-VID16ML-1
	Outputs	16 outputs	NPN	CRT1-VOD16ML
			PNP	CRT1-VOD16ML-1
Mounting Bracket	Unit with MIL Connectors			CRT1-ATT01

* These Units are also available with a DCN-TB4 Terminal Conversion Adapter included in the package. Add "(-B)" to the end of the model number to receive the Adapter as well.

Slave External I/O Connections in the appendix for applicable connectors.

Performance Specifications

For Basic Performance Specifications of Slave Units, refer to page 32.

Input Section Specifications

Item	Specification	
Model	CRT1-VID16ML	CRT1-VID16ML-1
I/O capacity	16 inputs	
Internal I/O common	NPN	PNP
ON voltage	17 VDC min. (between each input terminal and the V terminal)	17 VDC min. (between each input terminal and the G terminal)
OFF voltage	5 VDC max. (between each input terminal and the V terminal)	5 VDC max. (between each input terminal and the G terminal)
OFF current	1.0 mA max.	
Input current	At 24 VDC: 6.0 mA max./input At 17 VDC: 3.0 mA min./input	
ON delay	1.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	16 inputs/common	
Isolation method	Photocoupler	
Input indicator	LED (yellow)	
Installation	DIN Track or Mounting Bracket	
Power supply type	Multi-power supply	
Communications power supply current consumption	40 mA max. for 24-VDC power supply voltage 60 mA max. for 14-VDC power supply voltage	
I/O power supply current consumption	5 mA max. for 24-VDC power supply voltage	
Weight	80 g max.	

Output Section Specifications

Item	Specification	
Model	CRT1-VOD16ML	CRT1-VOD16ML-1
I/O capacity	16 outputs	
Internal I/O common	NPN	PNP
Rated output current	0.3 A/output, 2 A/common *	
Residual voltage	1.2 V max. (0.3 A DC, between each output terminal and the G terminal)	1.2 V max. (0.3 A DC, between each output terminal and the V terminal)
Leakage current	0.1 mA max.	
ON delay	0.5 ms max.	
OFF delay	1.5 ms max.	
Number of circuits per common	16 outputs/common	
Isolation method	Photocoupler	
Output indicators	LED (yellow)	
Installation	DIN Track or Mounting Bracket	
Power supply type	Multi-power supply	
Communications power supply current consumption	45 mA max. for 24-VDC power supply voltage 65 mA max. for 14-VDC power supply voltage	
I/O power supply current consumption	15 mA max. for 24-VDC power supply voltage	
Output handling for communications errors	Select either hold or clear from CX-Integrator.	
Weight	70 g max.	

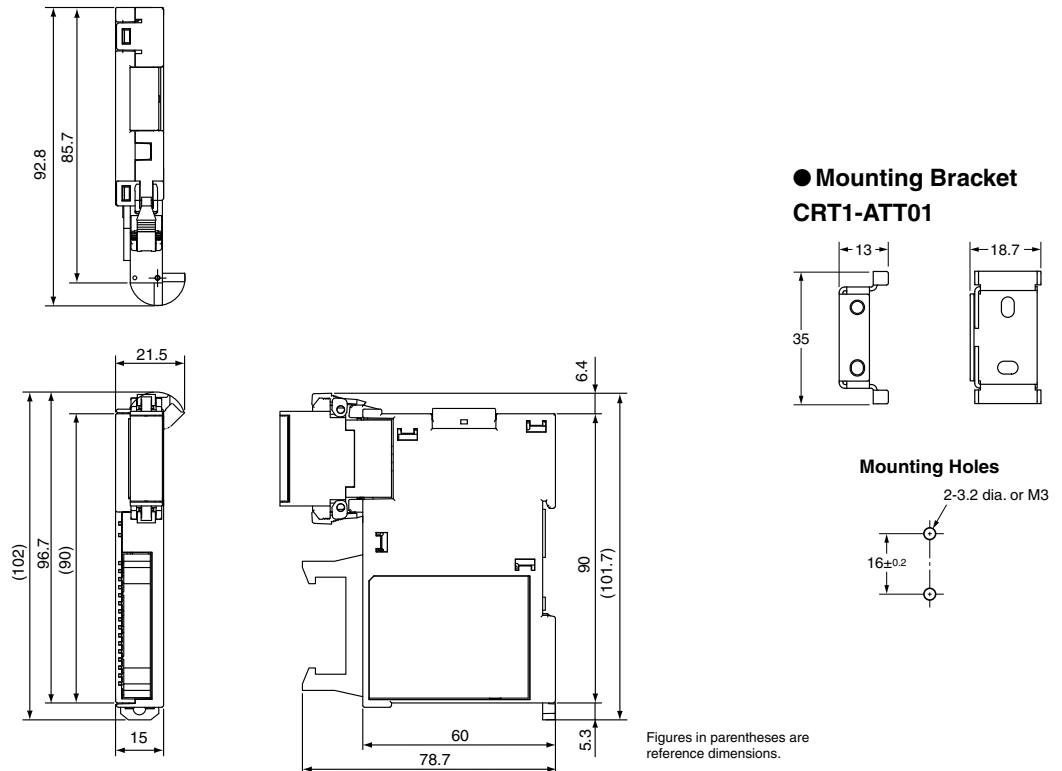
* Do not use a total external load current of more than 2 A, and do not use more than 1 A per V terminal or G terminal.

Dimensions

(Unit: mm)

CRT1-VID16ML (-1)
CRT1-VOD16ML (-1)

When a DCN4-TB4 Open Type Connectors Is Mounted



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