

Counter Unit

GT1-CT01

A Counter Unit Supporting Encoder Input for Use with MULTIPLE I/O TERMINAL

- High-speed pulse with counting speed of 50 kHz.
- Counting can be set to a multiplication factor of 1 or 4.
- Wide range of measurement: -8,388,608 to 8,388,607.
- One external input and two external outputs are available.
- DIN track mounting.



Ordering Information

I/O classification	External I/O points	I/O connections	Operating mode	Model
Counter Unit	Inputs: 1 Outputs: 2	Terminal block	Linear counter	GT1-CT01

General Specifications

I/O power supply voltage	20.4 to 26.4 VDC (24 VDC -15%/+10%)
Current consumption	90 mA max.
Connection distance	Total length: 3 m Maximum length between Units: 1 m
Ambient operating temperature	-10°C to 55°C
Ambient operating humidity	25% to 85% (with no condensation)
Weight	Approx. 250 g
Dimensions	110 x 60 x 65 mm (W x H x D)
Accessories	I/O Unit Connecting Cable (40 mm)

Output Specifications

Output current	0.5 A per point max.
Residual voltage	1.2 V max. (0.5 A DC between each output terminal and G)
Leakage current	0.1 mA max. (24 VDC between each output terminal and G)
ON delay time	0.5 ms max.
OFF delay time	1.5 ms max.
Number of circuits	2

Performance Specifications

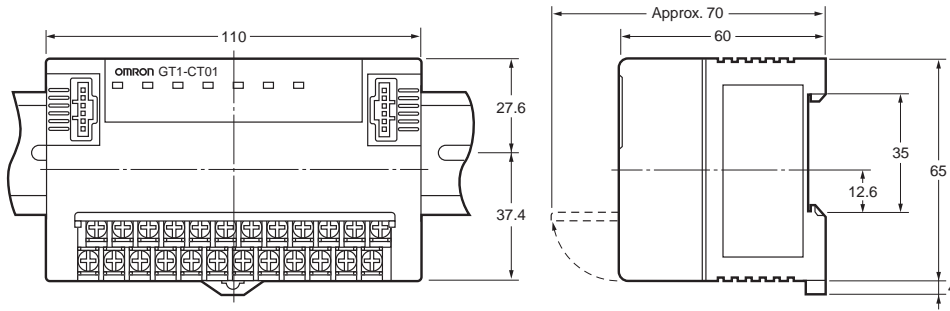
Number of counters	1	
Operating mode	Linear counter	
Count input	Input signal	Encoder input (A, B, Z)
	Signal level	24 VDC
	Input type	Differential phase pulse input Pulse and direction input
	Maximum counting speed	50 kHz (kcps)
	Counting range	-8,388,608 to +8,388,607
	Other	Differential phase pulse input can be set to a multiplication factor of 1 or 4.
External input	Input signal	External input (IN)
	Signal level	24 VDC
External output	Output	2 external outputs (OUT1 and OUT2)
	Maximum switching capacity	24 VDC 0.5 A
Allocated words	IN	3 words
	OUT	3 words

Applicable Encoders

Output type	Open-collector output
Power supply voltage	24 VDC
Recommended models	E6B2-CWZ6C E6H-CWZ6C

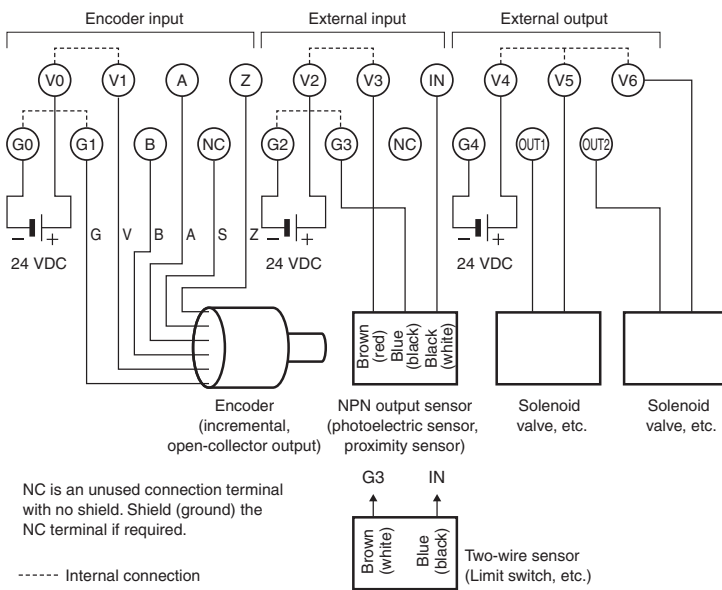
Dimensions

GT1-CT01



Note: Accessory cable included.

Wiring Diagrams



Read and Understand this Catalog

Please read and understand this catalog before purchasing the product. Please consult your OMRON representative if you have any questions or comments.

Warranty and Limitations of Liability

WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

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In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

Application Considerations

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of the product in the customer's application or use of the product.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this document.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property.
Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

Disclaimers

CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons. Consult with your OMRON representative at any time to confirm actual specifications of purchased product.

DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

Note: Do not use this document to operate the Unit.

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