



CMP-48N



CMP-72N



CMP-72TN

TECHNICAL SPECIFICATION

		CMP-48N	CMP-72N	CMP-72TN
Power Supply		220 VAC ±15% 50/60 Hz		
		24 VAC/VDC ±15%		
Power Consumption		3VA		
Display		7 Segment, 4 Digit, Size 0.56 Inch, 2 Raws	7 Segment, 6 Digit, Size 0.36 Inch, 2 Raws	TV
				PV and SV
		7 Segment, 8 Digit, Size 0.32 Inch, 1 Row	7 Segment, 6 Digit, Size 0.36 Inch, 2 Row	
Input	Range Display and Setting	Measurement Range -1999 to 9999	Measurement Range -199999 to 999999	Measurement Range -199999 to 999999
	Input Frequency	0 to 10 kHz		
	Input Type	Photo Switch, Proximity, Contace, Encoder, NPN, PNP		
	DC Source for Sensor	24 VDC 100 mA		
	Decimal Point Setting	0 to 0.00000	0 to 0.00000	0 to 0.00000
	Timer (Input Filter)	0.00 to 10.00 Sec	0.00 to 10.00 Sec	0.00 to 10.00 Sec
	Timer Accuracy	±10 ms		
	Input Resistance	Dry Contact		
Output	Relay Output	2 Relay Output 5A/250VAC		
Communication	Protocol	MODBUS RTU		
	Baud Rate	4800, 9600, 19200, 38400, 57600 bps		
	Parity	None, Even, Odd		
	Stop Bits	1, 2		
	Data Bits	8 Bits		
	Address	1-255		
Ambient Operation	Temperature	-10 °C to 60 °C		
	Humidity	85% RH Non-Condensing		
Ambient Storage	Temperature	-20 °C to 80 °C		
	Humidity	85% RH Non-Condensing		
Protection Degree	Front Protection Rating	IP52		
	Case Protection Rating	IP30		
Installation		Panel Mounting		
Material		ABS-V0		
Size (mm.)		48 x 48 x 80 mm	72 x 72 x 80 mm	
Wieght		148 g.	230 g.	240 g.

DESCRIPTION

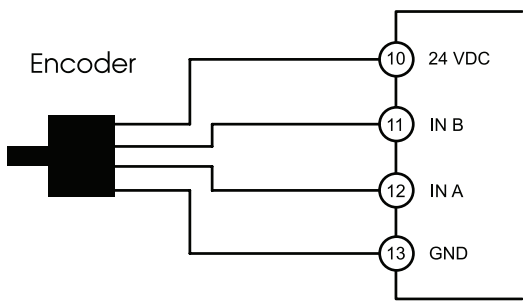
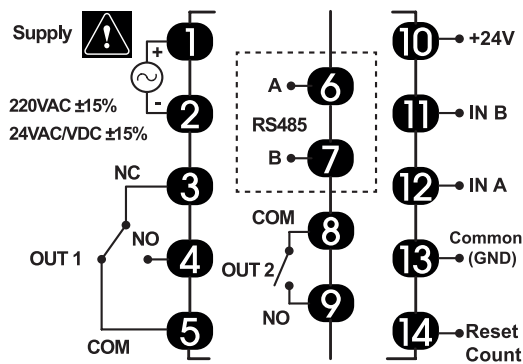
- Digital Counting Machine
- 7-segment display
- Get input from sensor devices such as Photo Switch, Proximity Switch, Encoder, Contact, NPN, PNP
- Available operating modes: 7 operating modes
- Can operate in count up and count down
- EEPROM memory keeps counts in case power failure.
- Can set the count sensitivity.
- Easy to use program through screen.
- Can communicate with computer through RS485 port, MOSBUS RTU

OPERATION

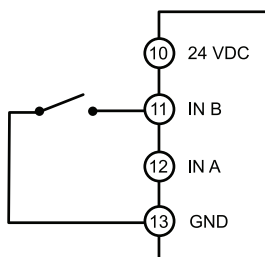
Digital display devices displaying results with 7-Segment in Real Time format, receiving input from. Various sensor devices such as Proximity receiving input from Various sensor devices such as Proximity Switch. Encoder, Mechanical Contact, NPN, PNP. It can accept input as fast as 10kHz. 11 operating modes are available with FRAM can link with Computer or PLC Logging, Edit values via RS485 and can monitor.

WIRING DIAGRAM

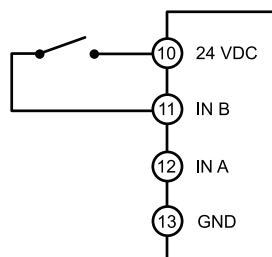
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Active Low (NPN)



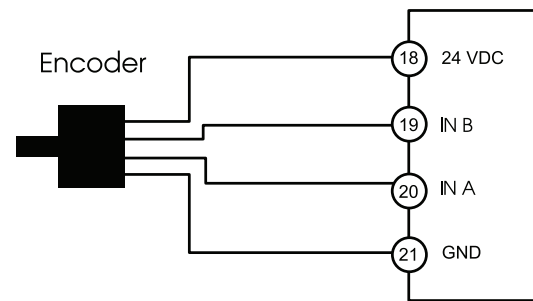
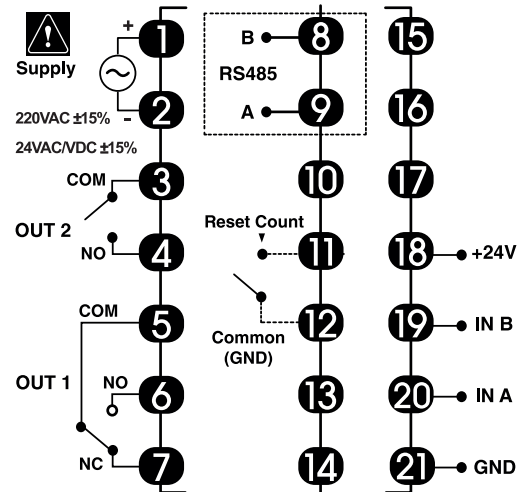
Active High (PNP)



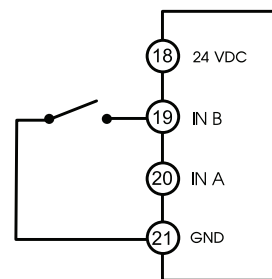
WARNING

- Make sure the correct wiring connection before turning on electricity. Mis-wiring may cause malfunction of the unit and fire.
- Never modify the unit to prevent damage or incident such as malfunction and fire etc.

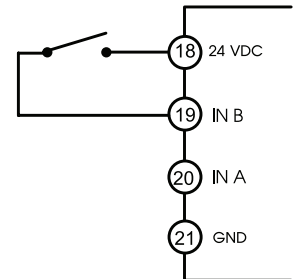
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Active Low (NPN)



Active High (PNP)

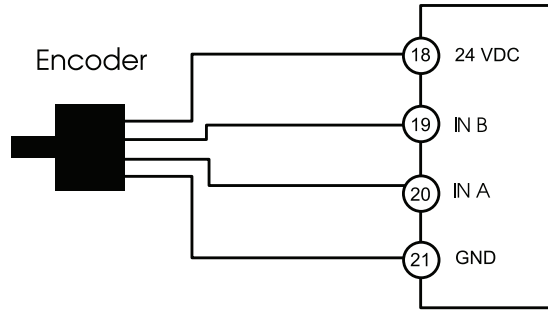
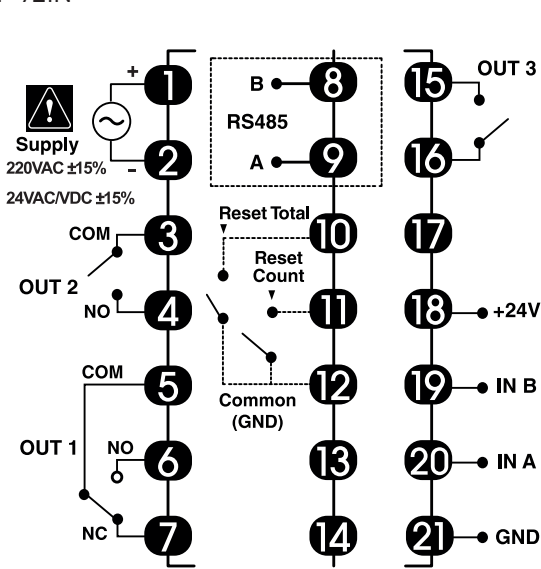


WARNING

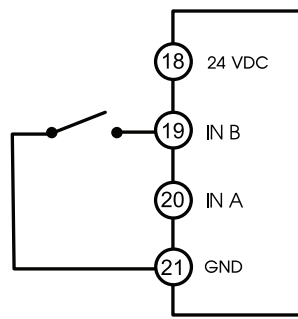
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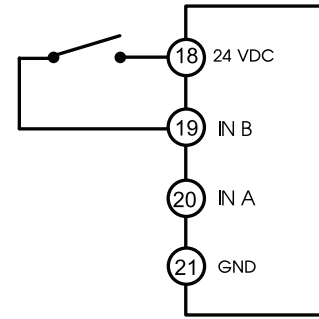
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Active Low (NPN)



Active High (PNP)

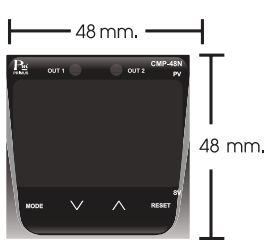


WARNING

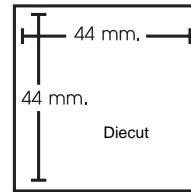
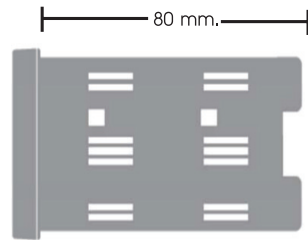
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DIMENSION

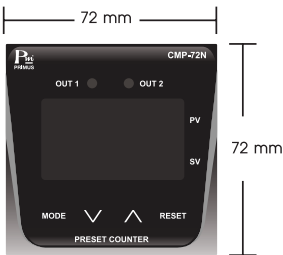
CUTTING



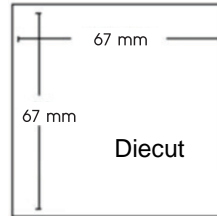
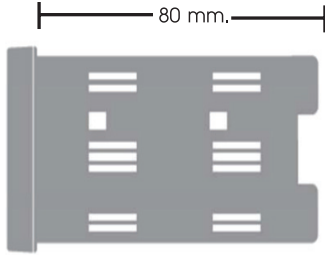
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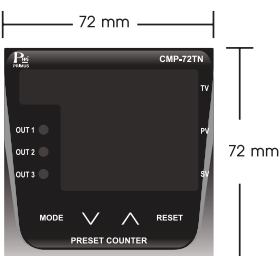
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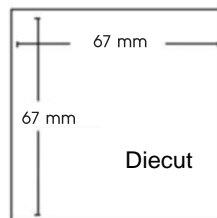
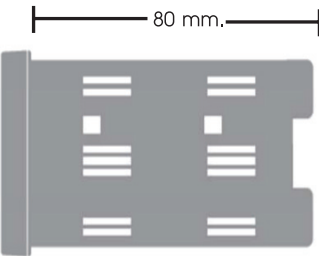
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EXAMPLE

1. Encoder wheel type 100 pulse/round when run complete 1 round will have 0.45 metre. User needs to show in metre unit decimal 2 position.

Calculation

Display value = Pulse from actual counted * Scale

$$0.45 = 100 * \text{Scale} = \text{multiplier/Divisor}$$

Multiplier (C.M.L) = 45, Divisor (C.d.f) = 10000, 45/10000

make multiplier, divisor to be simplest form 45/10000 = 9/2000

Setting

Multiplier (C.M.L) = 9, divisor (C.d.f) = 2000

Decimal (d.P) = 0.00

Input (InPulse) = Encoder

2. Production line install Sensor NPN type count product to pack in the boxes.

12 pcs. per box by display quantity of boxes.

Calculation

Display = Pulse from actual counted * Scale.

$$1 = 12 * \text{Scale} = \text{multiplier/divisor}$$

Multiplier (C.M.L) = 1, divisor (C.d.f) = 12, 1/12

Setting

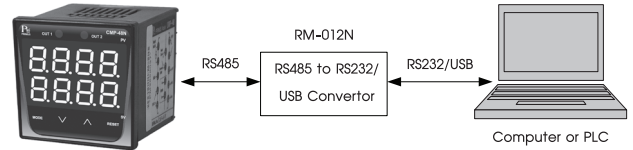
Multiplier (C.M.L) = 1, divisor (C.d.f) = 12

Decimal (d.P) = 0

Input (InPulse) = H.F.S.P.d

SERIAL COMMUNICATION

The CMT series are equipped with a RS485 serial communications interface to allow connection to computer or PLC. MODBUS protocol is provided as standard communication. The user can connect CMT series as network up to 255 meters.



MODBUS PROTOCOL This MODBUS Protocol has been implemented in accordance with MODBUS.ORG MODBUS Application Protocol Specification V1.1 With the following conditions applying

The following conditions apply Baudrate must be set for 4800, 9600, 19200, 38400, 57600 bps The format is MODBUS RTU UART data 8 bits, 1 stop bit and no parity Data is considered to be half duplex using 2 wire.

Exception Responses

The following exception codes will be supported only.

- 01 Illegal function
- 02 Illegal data address
- 03 Illegal value

ORDERING CODE

