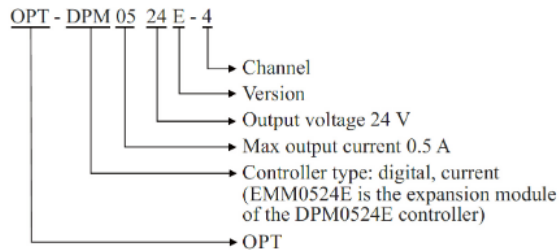


Model No.

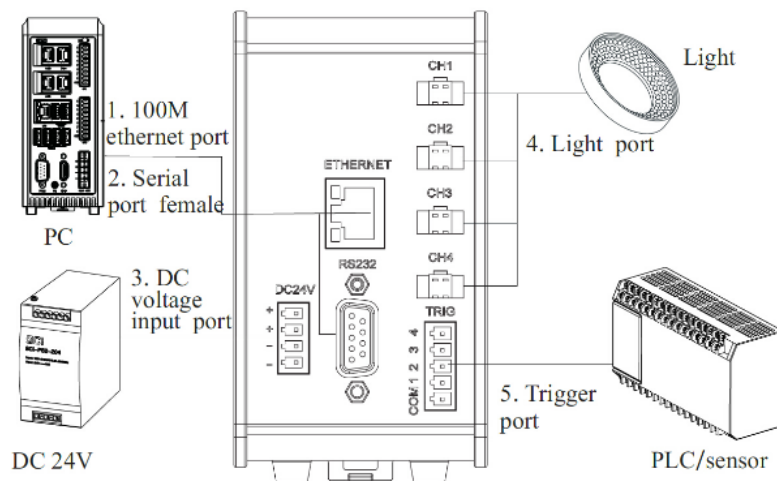


Product Features

1. 256 intensity levels
2. 100Mb Ethernet interface
3. RS232 interface
4. Width of the trigger pulse adjustable
5. Very compact housing for easy installation via screws or DIN rail mounting
6. Automatic detection for the rated current of lights, also can be set manually
7. Can expand to 16 channels by adding the EMM0524 expansion module
8. 20 - 24 V DC input voltage
9. High insulation resistance: $>20M\Omega$, 500V DC for 15 minutes (testing condition)
10. Trigger signal input: connect an external signal source (e.g. a camera trigger signal) for synchronized strobing of the illumination device.

Device Overview

No.	Item	Description
1	100 Mb Ethernet port	Ethernet communication interface with the PC
2	Serial port, female	RS232 communication interface with the PC
3	DC voltage input port	For 20 - 24 V DC power input
4	Light port	In total, four lights can be controlled individually
5	Trigger connector	For connection with an external trigger source such as a PLC, sensor or camera; output pulse width can be adjusted



Connection Setup

- Step 1: Refer to drawing above to connect the light with the controller.
- Step 2: For external triggering, connect the external trigger source with the trigger port.
- Step 3: Connect the controller with 20 - 24 V DC input. If the intensity of the light shall be controlled via PC, you need to connect the PC with an RS232 cable or Ethernet cable before the controller is switched on. Use the provided software or your own application to communicate with the controller. You can adjust the settings via the PC or manually.

Parameter Description

Item	Parameter	Instruction
Input voltage	20 - 24 V DC	
Automatic detection for the rated current of lights	For 10mA-0.5A 24V Light	Set via the DEMO software
Max. output current	10mA-0.5A	Set manually or via DEMO software
Short circuit protection	Yes	Protection shuts down the related channel, only after the fault removed and restarting the controller can be re-activated
Over current protection	Yes	When the current is over 10% of set value the related channel is shut down. Channel is reactivated after its restart
Normal trigger mode	Intensity control levels : 0~255	
High intensity trigger mode	Output 1A per channel	
Normal trigger pulse width	1 ms-999ms	Adjust via DEMO software
High intensity trigger pulse width	0.01 ms-5.00ms	Adjust via DEMO software
Output power	12 W per channel, 48 W per 4 channels, Total power output: 100W	Only for 24 V lights with 10mA - 0.5 A
Communication	RS232 or ethernet	
Standby power consumption	<3W	
Hi-Pot test	1500 V AC, max. 1 minute	Leak current < 10mA
Insulation resistance	500 V DC	Insulation resistance >20 MΩ
Working temperature	-5°C-50°C	
Size [mm]	59*69*110	
Weight [kg]	0.4kg	

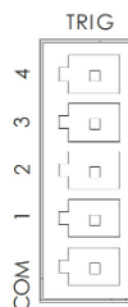
Trigger port and setup

This controller series support four trigger modes: real-time positive trigger, real-time negative trigger, rising edge trigger, falling edge trigger.

There are 4 trigger channels: 4 connectors for Trigger +, and "COM" is the common interface of Trigger -.

The high voltage level (input voltage range is 5V to 24V) and low voltage level (input voltage range is 0V-2V) is separated by the dual optocoupler inside.

The default trigger mode is rising edge trigger.



Normal trigger mode

Set the controller in normal trigger mode via software.

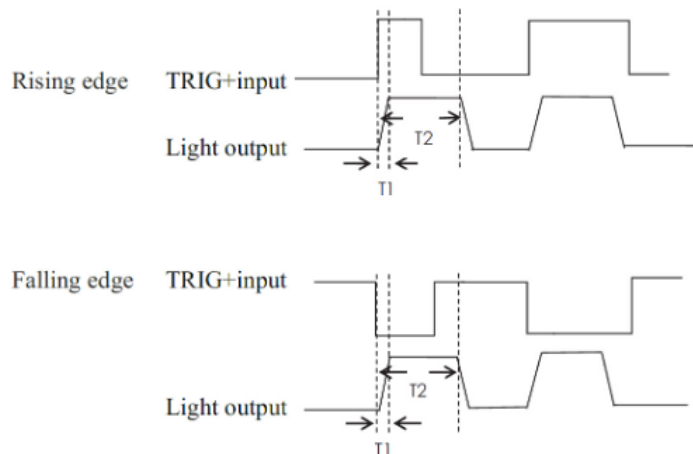
Intensity levels can be set from 0 to 255; the width of trigger pulse can be set from 1 to 999 ms via DEMO software.

High-intensity trigger mode

Set the controller in high intensity trigger mode via DEMO software.

Output current is 1A per channel. The trigger width of trigger pulse can be set from 0.01 to 5.00 ms via DEMO software.

Sequence diagram



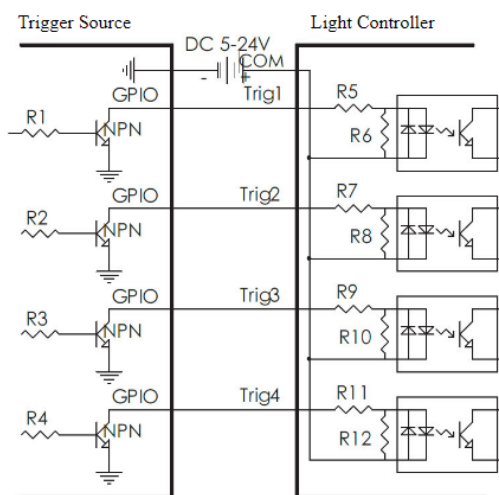
Description

T1 is the trigger delay time, T2 is the width of the trigger pulse.

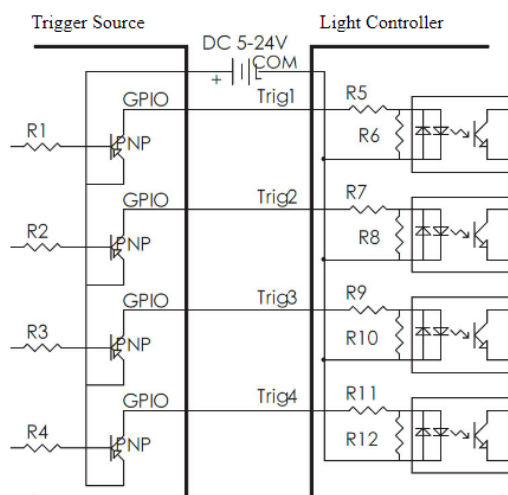
Normal trigger mode: $T1 \leq 80 \mu s$; T2 can be set from 1 to 999 ms.

High intensity trigger mode: $T1 \leq 80 \mu s$; T2 can be set from 0.01 to 5.00 ms.

Drawing of two kinds common trigger connections



Trigger Input Circuit for NPN Type Trigger

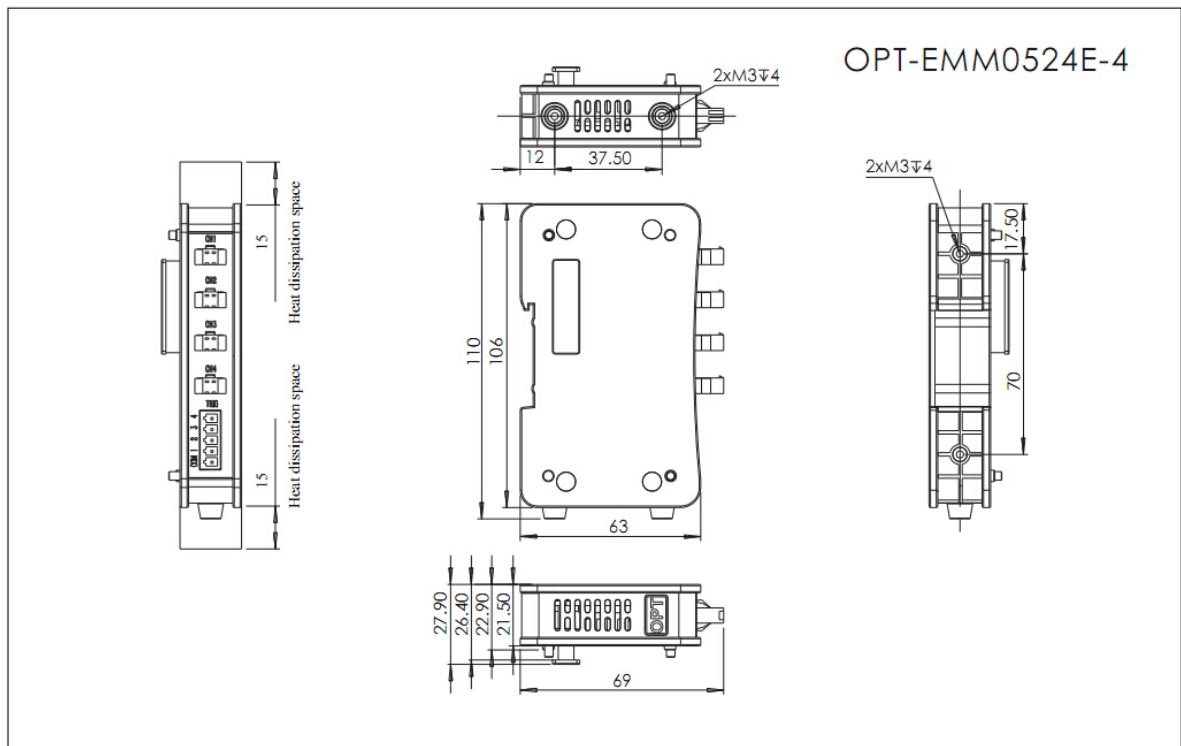
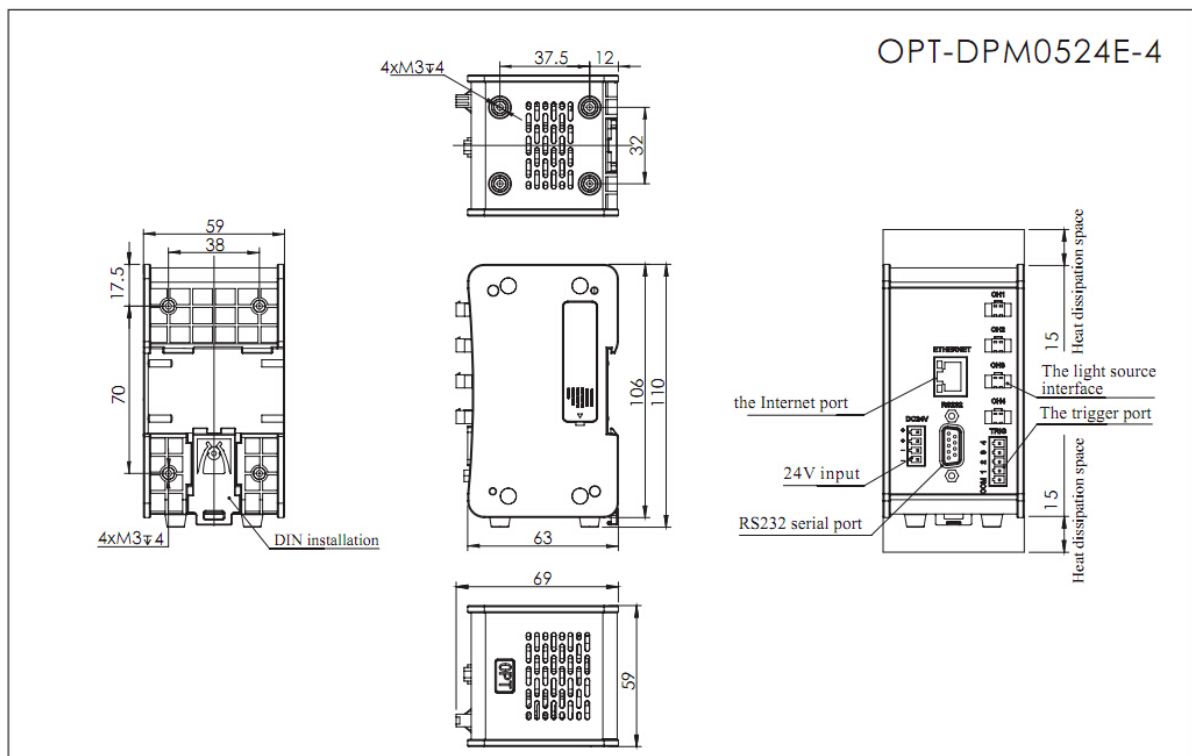


Trigger Input Circuit for PNP Type Trigger



LASER 2000

Dimensions [mm]



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