

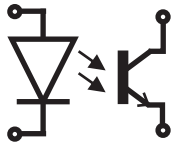
## Module Datasheet

### Introduction

SensOper MC-EX-FQ4 module is an expansion module that can be used with MC-CPU-CM4-Gx CPU module. The major purpose of this expansion module is to provide outputs. This module has four outputs optically separated internally. Further, This Fast Transistor Output expansion module connects to a CPU module by board-to-board connector with 40 pins.

### Features

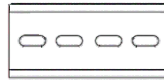
Optically Isolated



Transistor Output



Din Rail Mounting



LED Indicators



### Expansion

This module supports maximum one unit for single Bus expansion.



Figure 1: Front and Side view of the Fast Transistor Output expansion module

### Specifications

Table 1: Fast Transistor Output expansion module specifications

Range of Products	Modular Industrial Controller
Product Type	I/O Expansion
Programming	Directly access via RPI CM4 GPIO
Address Configuration	N/A
Output Count	4 x Open Collector (Transistor)
Protection	Optically Isolated
I/O Expandability	40 pin board to board connectivity

### Electrical & Mechanical

Table 2: Analog Input expansion module Electrical Characteristics

Electrical	
Rated Supply Voltage	24V DC
Power Consumption	32.6 - 40.4 W

Table 3: Analog Input expansion module Mechanical Characteristics

Mechanical	
Electrical Connection	Removable screw terminal block for inputs and outputs(pitch 5.08 mm)
Mounting	Top hat TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.54 rail conforming to IEC 60715
Height	113.6 mm
Depth	99.60 mm
Width	22 mm
Module Weight	0.21 kg

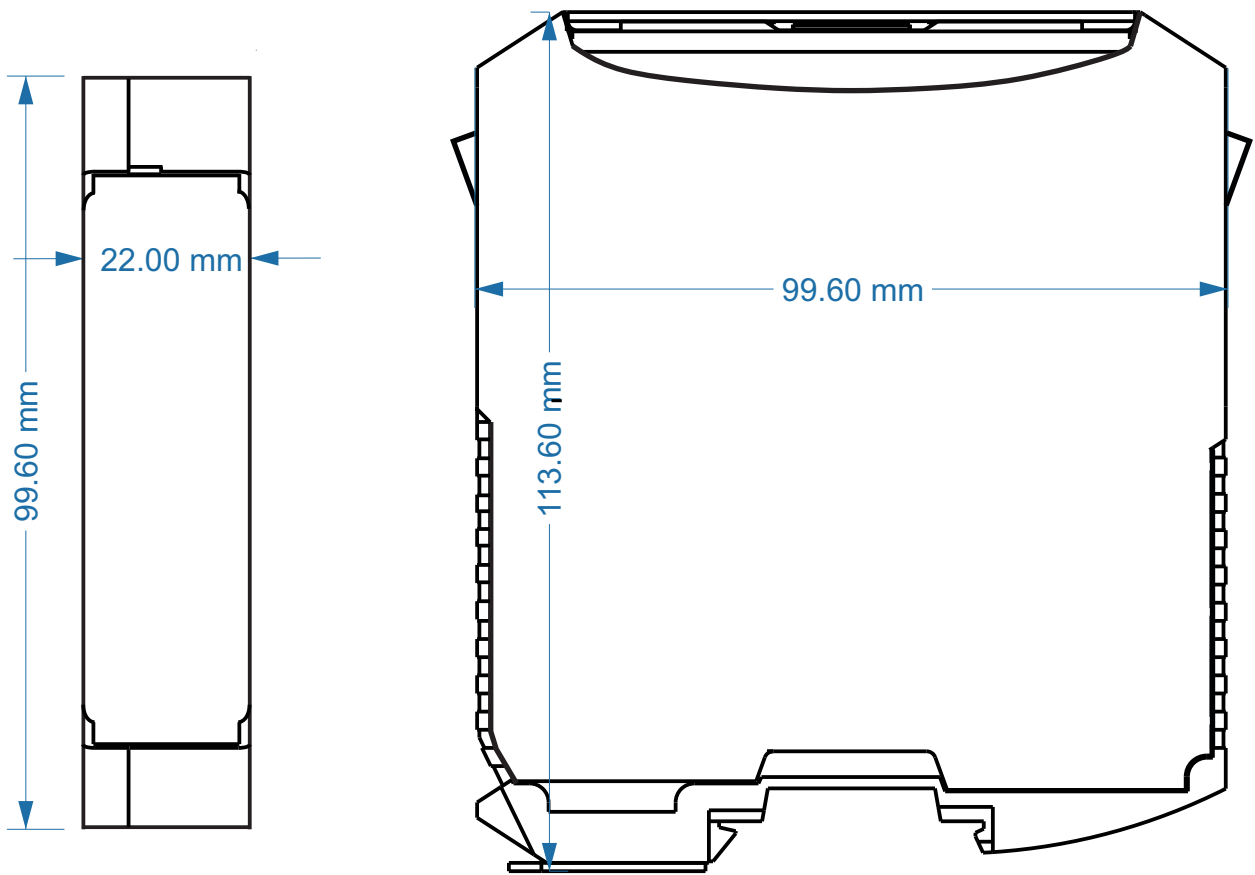
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### Environmental

**Table 4:** Fast Transistor Output expansion module Compatible Environmental Features

Relative Humidity	10-95% without consideration in operation
IP Degree of Protection	IP 20
Operating Temperature	-10 to +85 Celsius (14 to 185 Fahrenheit)
Storage Temperature	-25 to +85 Celsius (-13 to 185 Fahrenheit)
Operating Altitude	0 to 2000m
Storage Altitude	0 to 3000m
Stock Resistance	15 gn for 11 ms

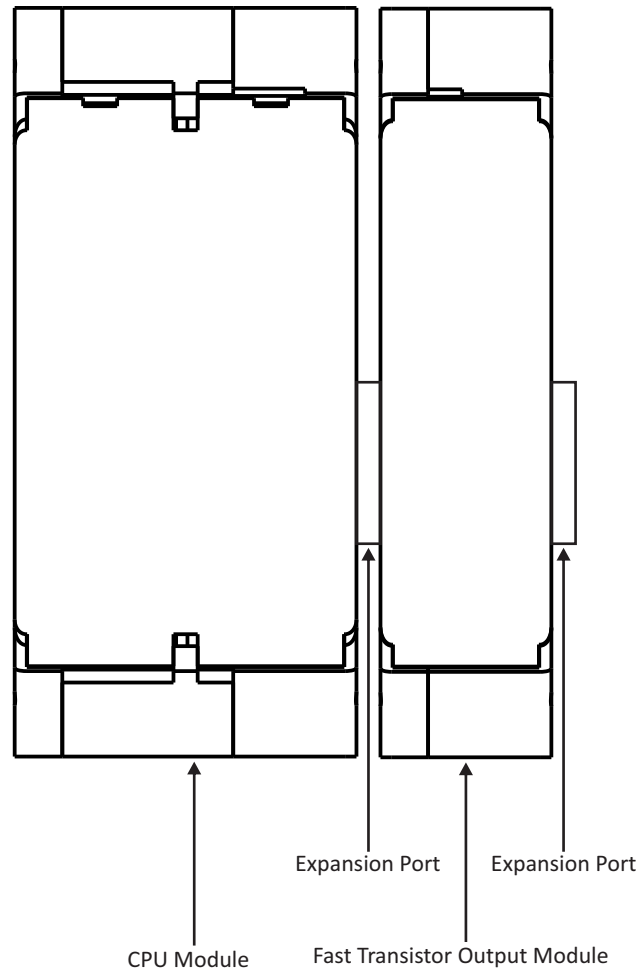
### Module Dimensions



**Figure 2:** Front view and Side view Dimensions of Fast Transistor Output module

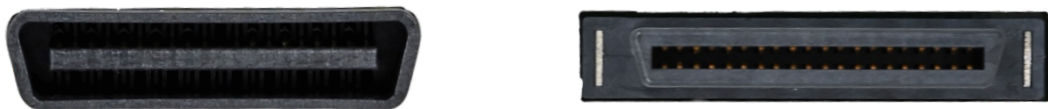
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### Module Expansion



**Figure 3:** Expansion Modules connect with CPU Module

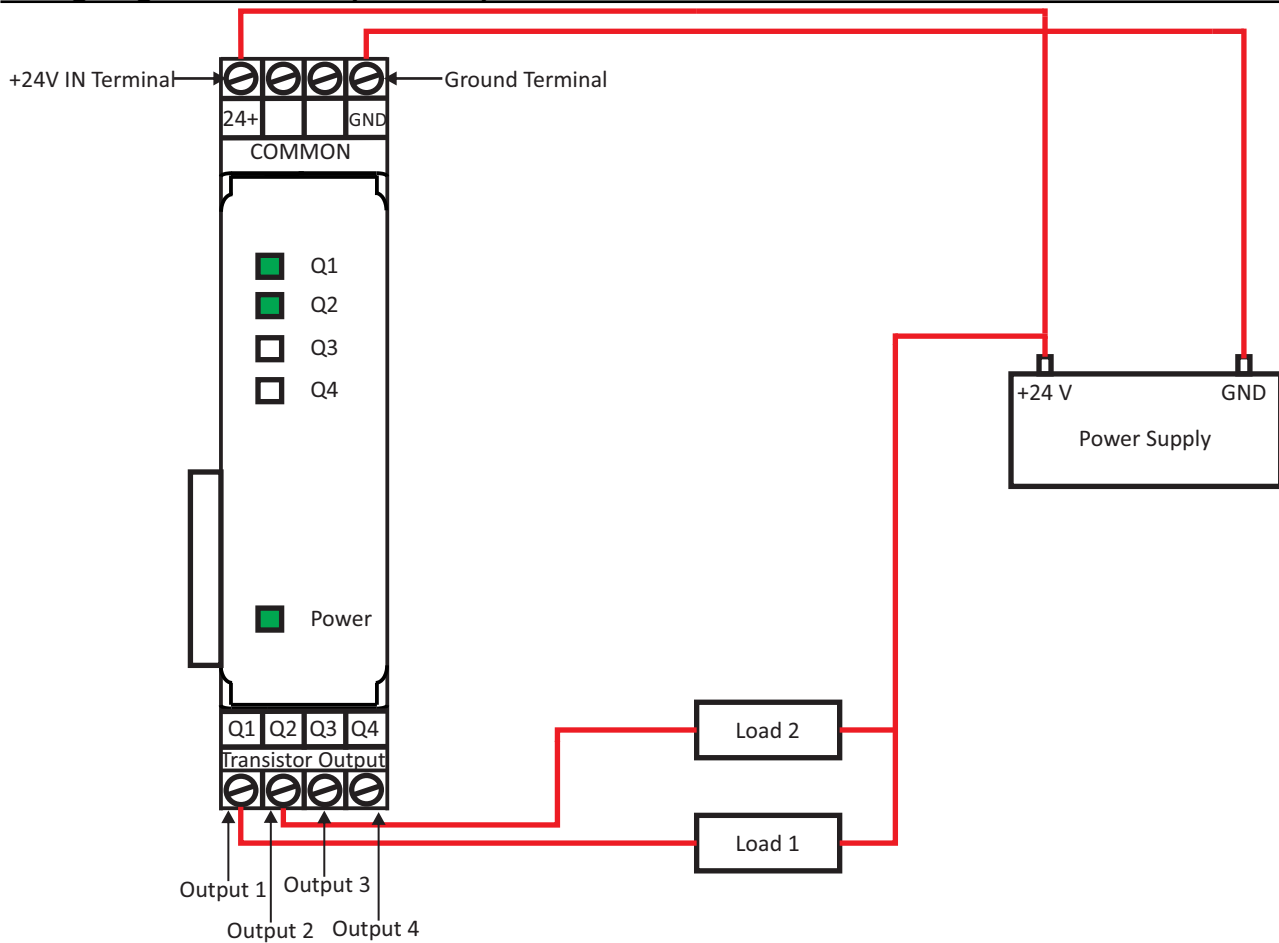
MC-EX-FQ4 module have Male and Female port can be connected with CPU module or another expansion modules .



**Figure 4:** Expansion Port male and female ports

## Module Datasheet

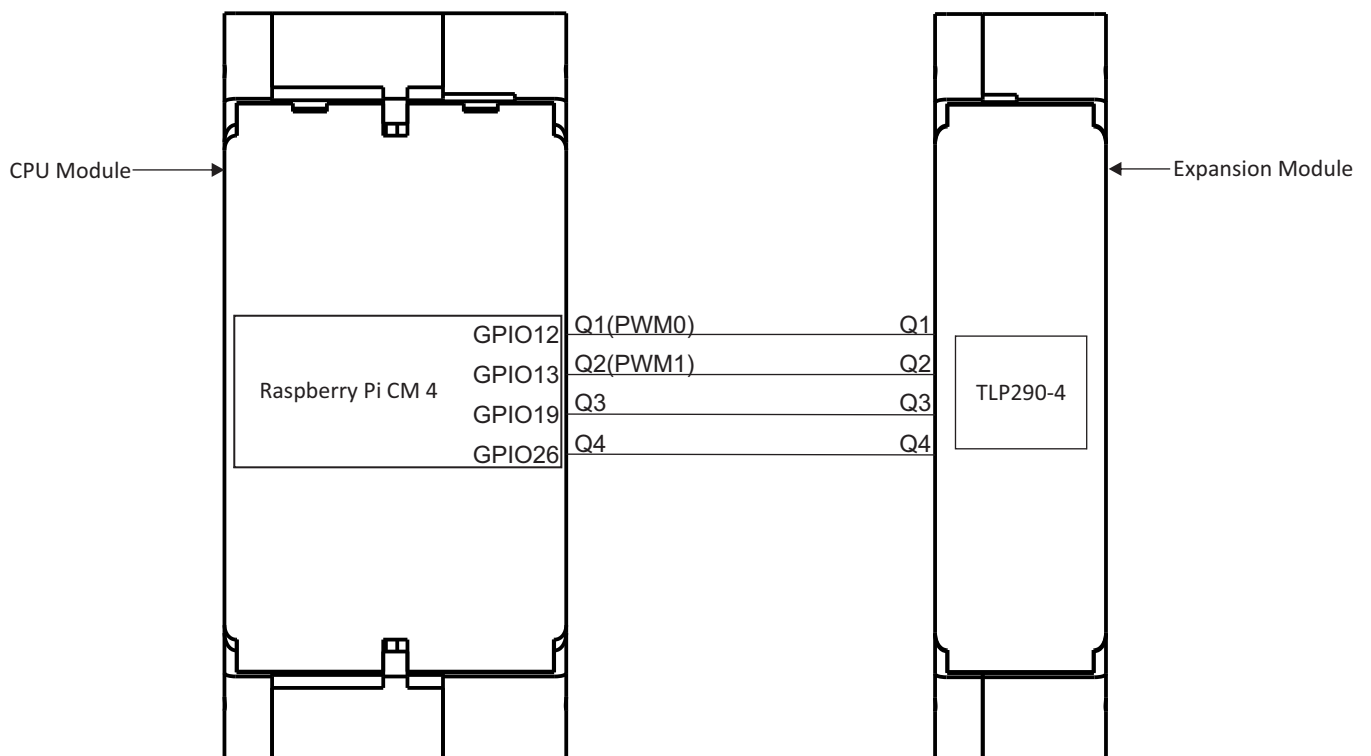
### Wiring Diagram of Power up and Output Terminals



**Figure 5:** The wiring diagram of the Fast Transistor Output Module.

Figure 5 shows how to power up the Transistor Output Module. If the wiring is correctly done the Power indication LED will turn on. Further, this wiring diagram shows how to receive output from the module to load. When Output signal begin the Q1, Q2, Q3 & Q4 LED indication will blink accordingly.

### CPU Module and Expansion Module GPIO Connection Diagram



**Figure 6:** The GPIO connection with CPU module and Expansion Module.

### Module Datasheet

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#### Revision History

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The table shown below include the revision history of this document.

Revision Number	Date	Substantial Changes
0	18/3/2022	First Edition of Startup guide
1	-	-

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