

Product Datasheet

Product Characteristics

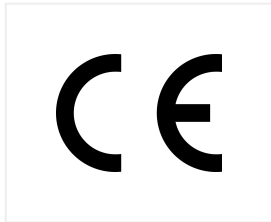
SE-EX-QX8

MCP230008 I2C GPIO Expander

8 x Open Collector Transistor Outputs

Product Certifications

Product is certified to comply with CE Standards
2014/30/EU- Electromagnetic Compatibility (EMC)
Annex III, Part B, Module C



EN 61131-2:2007
EN 61010-1:2010+A1:2019
EN IEC 61010-2-201:2018

Product Specifications

Range of Product	SENS EX
Product type	I/O Expansion Module
Rated supply voltage	24V DC
Discrete input number	8 x Open Collector Transistor Outputs
Communication	I2C

Main

Supply voltage limits	20.4....28.8V
Inrush current	<=10A
Maximum Collector Current	600mA
Collector Power Dissipation	300mW
Local signaling	1 LED green for PWR

Electrical connection	Removable screw terminal block for inputs and outputs (pitch 5.08 mm)
Mounting support	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 rail conforming to IEC 60715 Plate or panel with fixing kit
Height	90.50 mm
Depth	56.60 mm
Width	36.30 mm
Product weight	0.13 Kg

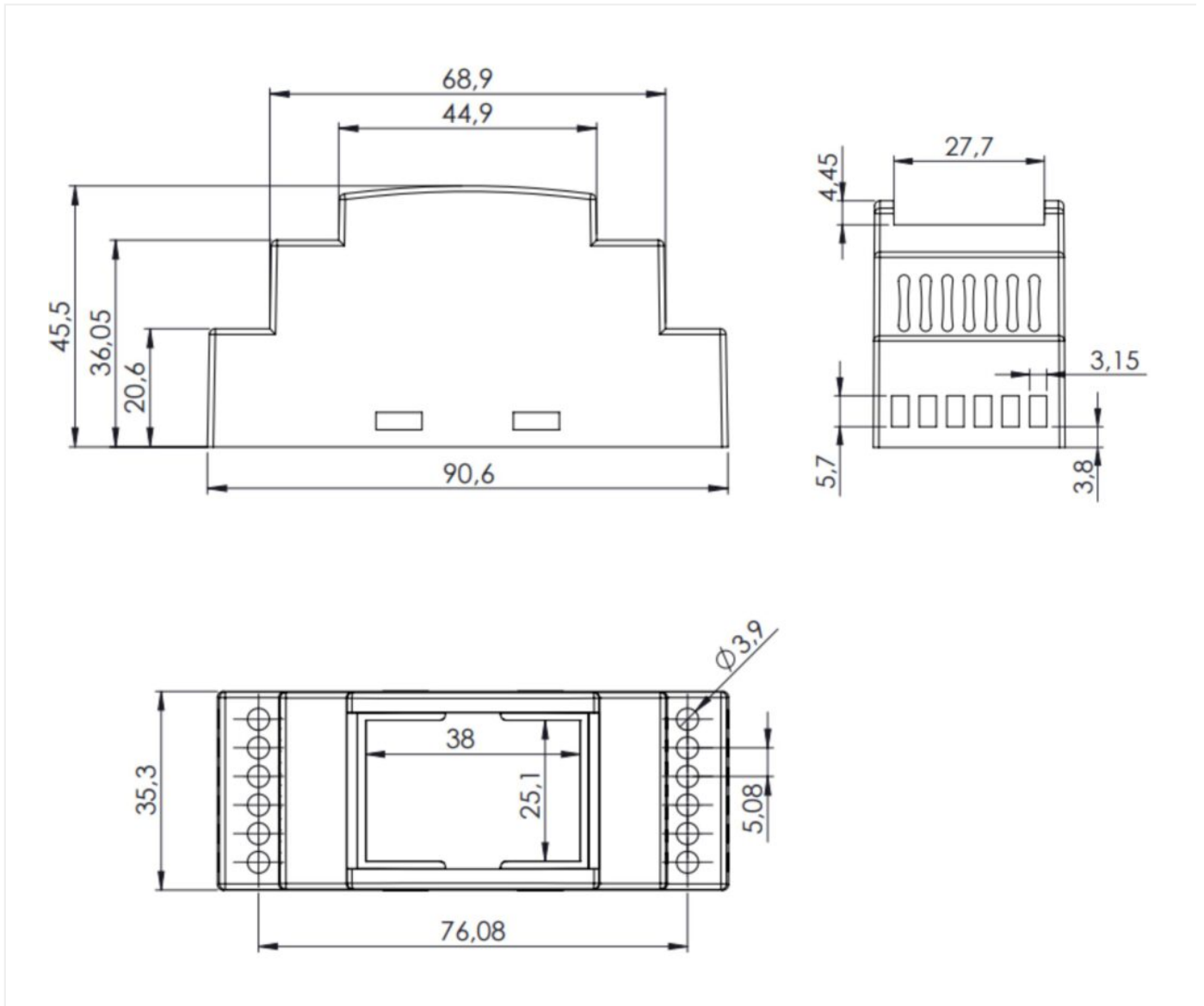
Complementary

Environment

Resistance to electrostatic discharge	4kV on contact 8kV on air
Resistance to electro magnetic fields	10 V/m (80 MHz 1GHz) 3 V/m (1.4 MHz 2 GHz) 1 V/m (2 MHz 3 GHz)
Immunity to microbreaks	10 ms
Relative humidity	10...95% without condensation in operation
IP degree of protection	IP20
Operating altitude	0...2000m
Operating Temperature	-40°C to +125°C
Storage altitude	0...3000m
Shock resistance	15 gn for 11 ms

Environment

Dimensions



SE-EX

Terminal Layout

24+

GND

Q5

Q6

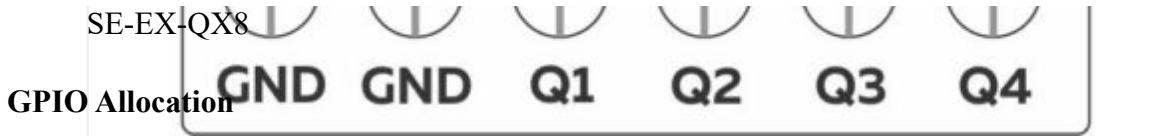
Q7

Q8



PWR





MCP230008	I/O
GP7	Q1 – TRANSISTOR OUTPUT 1
GP6	Q2 – TRANSISTOR OUTPUT 2
GP5	Q3 – TRANSISTOR OUTPUT 3
GP4	Q4 – TRANSISTOR OUTPUT 4
GP3	Q5 – TRANSISTOR OUTPUT 5
GP2	Q6 – TRANSISTOR OUTPUT 6
GP1	Q7 – TRANSISTOR OUTPUT 7
GP0	Q8 – TRANSISTOR OUTPUT 8

MCP23008

I2C SDA	GPIO16
I2C SCL	GPIO17

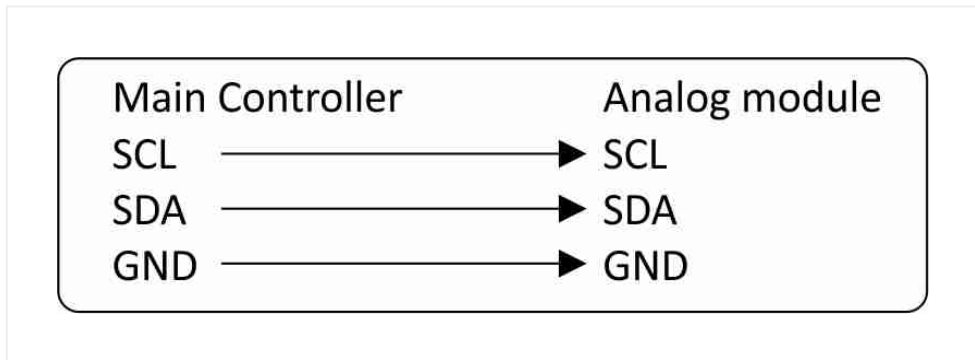
Expansion Port Connection

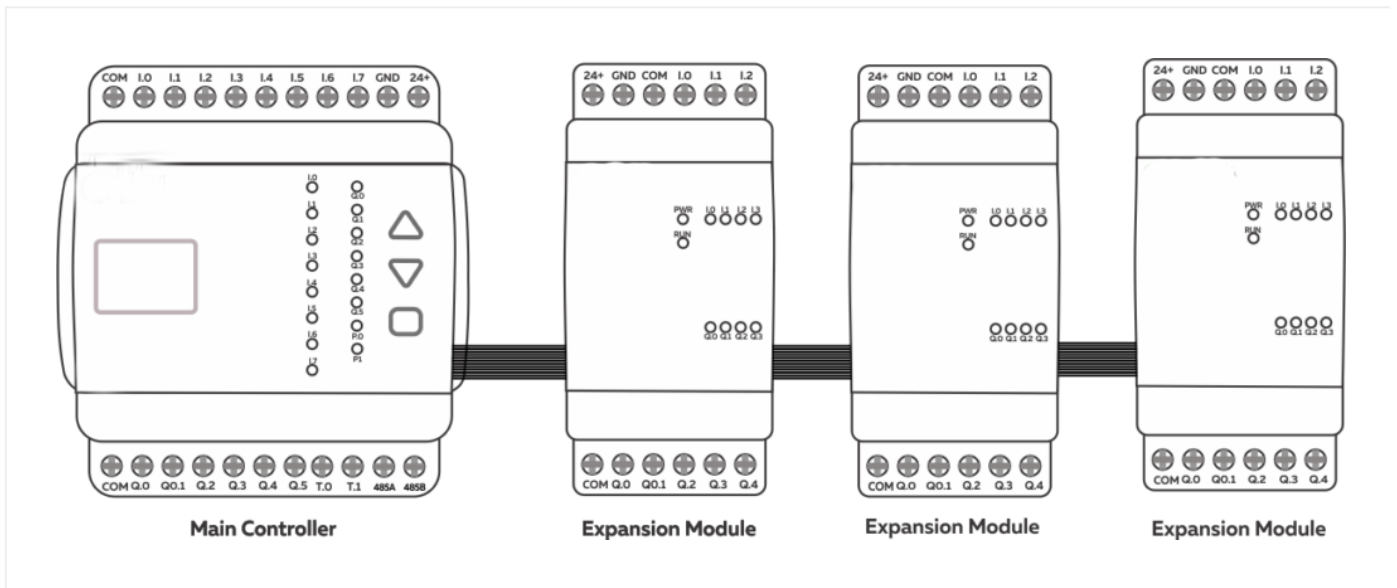
Expansion Port

The expansion port of the SENSOPER smart Controllers can be utilized for external sensor connections where raw GPIO connections are required or they can be used to plug SENSOPER Expansion Modules

Browse [SENSOPER Expansion \(https://norvi.lk/norvi-expansion/\)](https://norvi.lk/norvi-expansion/) Product range

How to Connect SENSOPER Expansion Modules

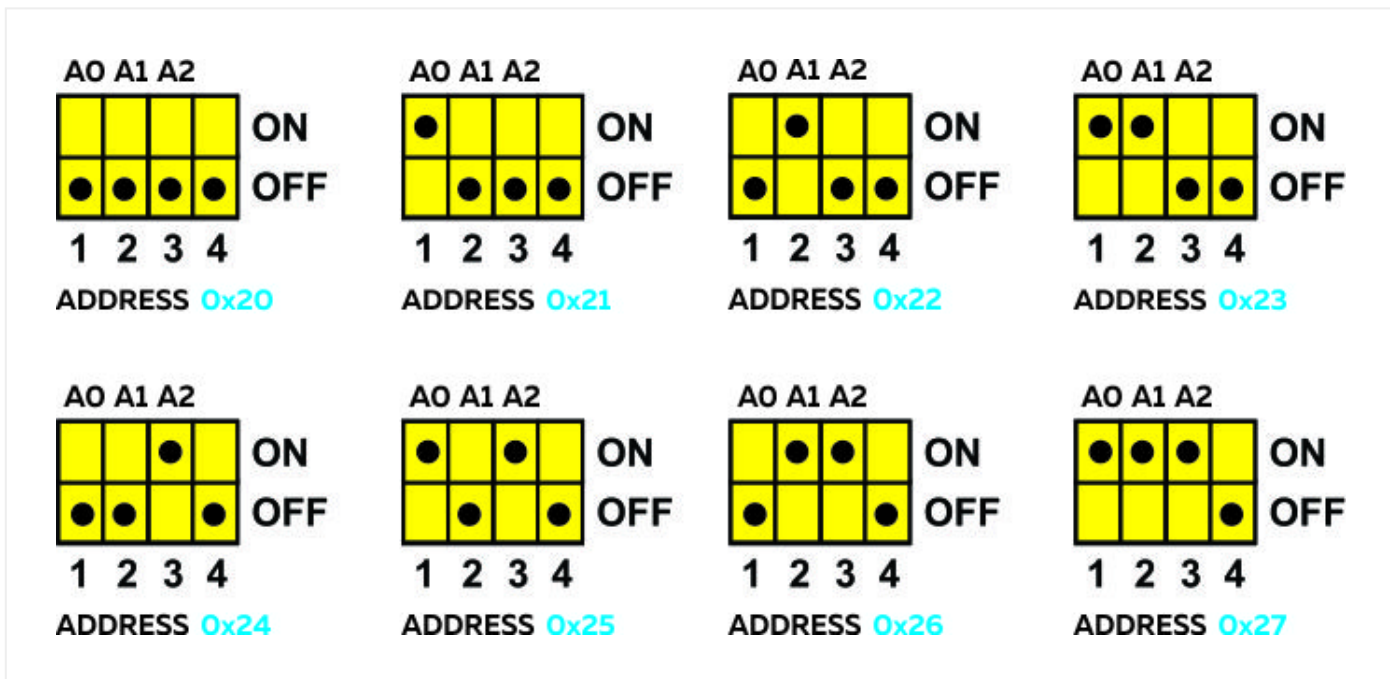




Expanding SENSOPER Controller

I2C Address Setting

I2C Address of the expansion module can be configured by switching DIP Switches in the bottom of the expansion module. The device can be configured in 8, I2C addresses using the first 3, DIP switches.



Updated on March 11, 2023

