

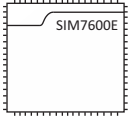
Module Datasheet

Introduction

SensOper MC-EX-GSMLTE module is an expansion module that can be use with MC-CPU-CM4-Gx CPU module. The major functionality of this module was for enable cellular communication. For establish cellular communication SIM7500E LTE Modem was integrated with this expansion module. So, this expansion module can transfer data with LTE CAT1, EDGE, and GPRS. With this module cellular operation capability make possible to control other expansion modules from remote location. The module expansion is supported by board-to-board connector with 40 pins.

Features

Powered by SIM7500E



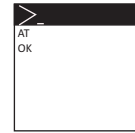
Support FDD-LTE Bands



Support GSM, GPRS, EDGE



Controls via AT Commands



Expansion

This module supports maximum one unit for single Bus expansion.



Figure 1: Front and Side view of GSMLTE module

Specifications

Table 1: GSMLTE expansion module specifications

Range of Products	Modular Industrial Controller	
Product Type	I/O Expansion	
Programming	via AT commands	
SIM7500x Compatible Bands	GSM	900/ 1800 MHz
	WCDMA	B1/ B2/ B5/ B8
	LTE-FDD	B1/ B2/ B3/ B4/ B5/ B7/ B8/ B12/ B13/ B18/ B19/ B26/ B28
SIM7600x Compatible Bands	GSM	850/ 900/ 1800/ 1900MHz
	WCDMA	B1/ B2/ B5/ B8
	LTE-FDD	B1/ B2/ B3/ B4/ B5/ B7/ B8/ B12/ B20/ B66
	LTE-TDD	B38/ B40/ B41
Services	FTP/ FTPS/ HTTP/ HTTPS/ SMTP/ POP3/ DNS/ MMS	
I/O Expandability	40 pin board to board connectivity	

Module Datasheet

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

Environmental

Table 4: GSMLTE 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
Shock Resistance	15 gn for 11 ms

Module Datasheet

Module Dimensions

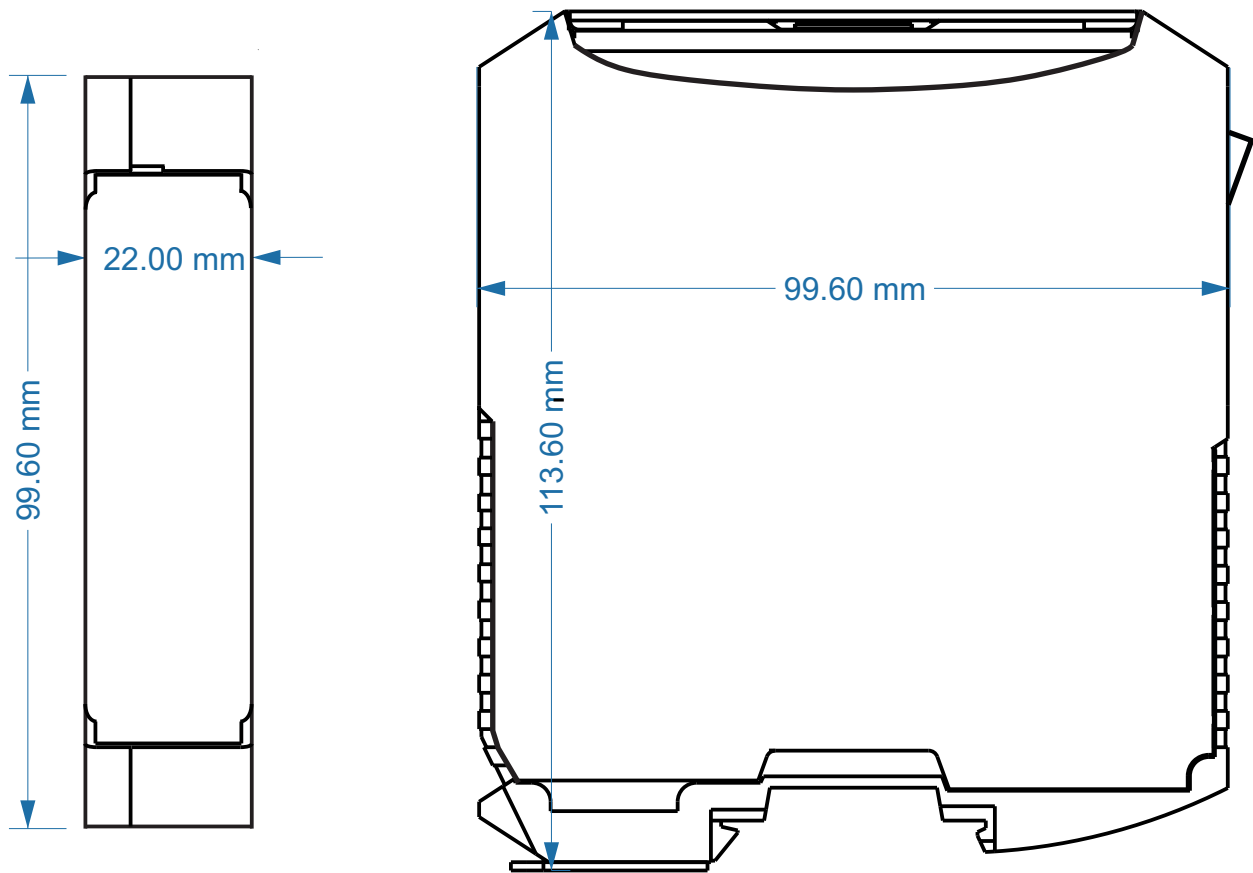


Figure 2: Front view and Side view Dimensions of GSMLTE module

Module Datasheet

Module Expansion

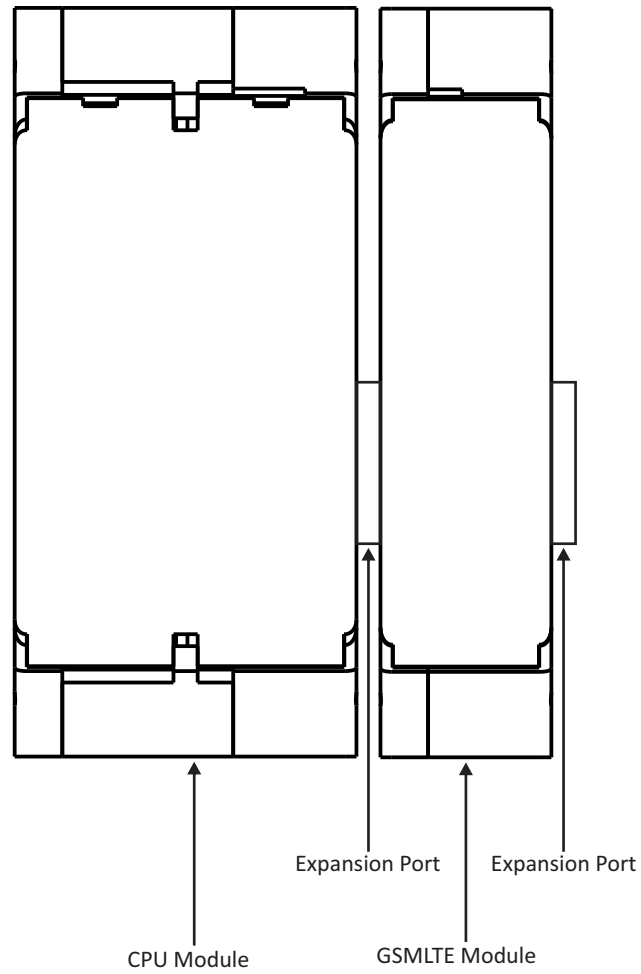


Figure 3: Expansion Modules connect with CPU Module

MC-EX-GSMLTE 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 Powerup

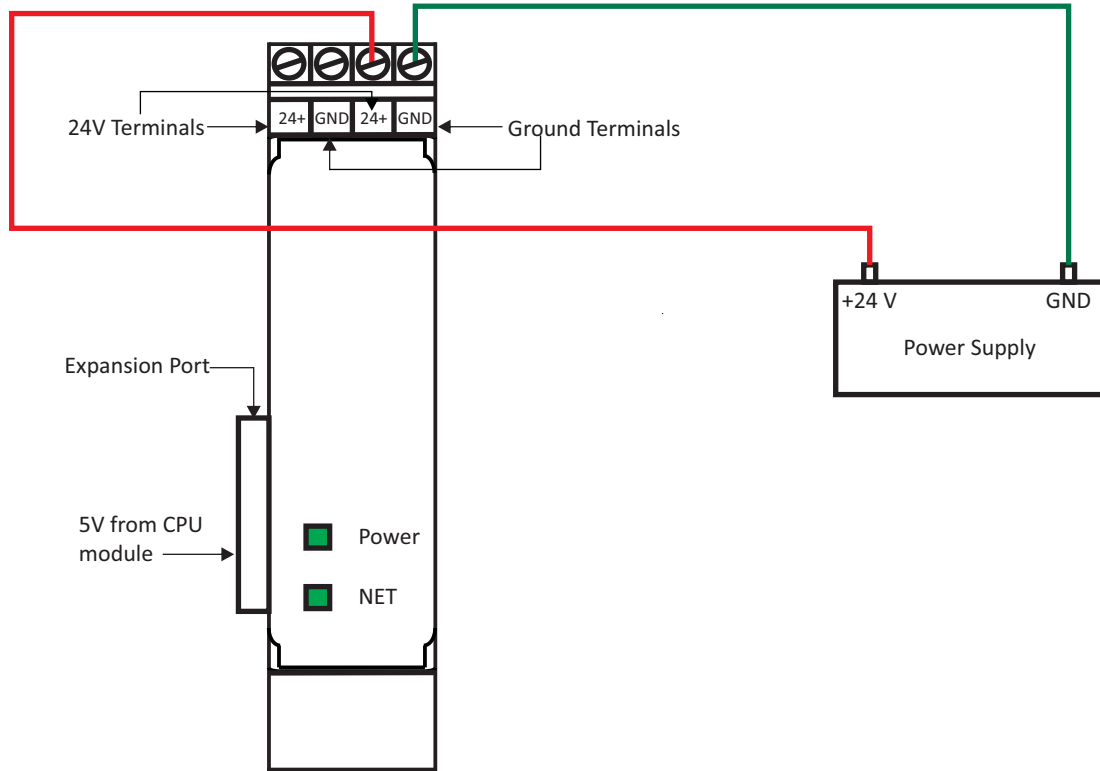


Figure 5: The wiring diagram of the GSMLTE Module.

Figure 5 shows how to power up the GSMLTE Module. Module operation will voltage provide via power supply. If the wiring is correctly done the Power indication LED will turn on.

CPU Module and Expansion Module GPIO Connection Diagram

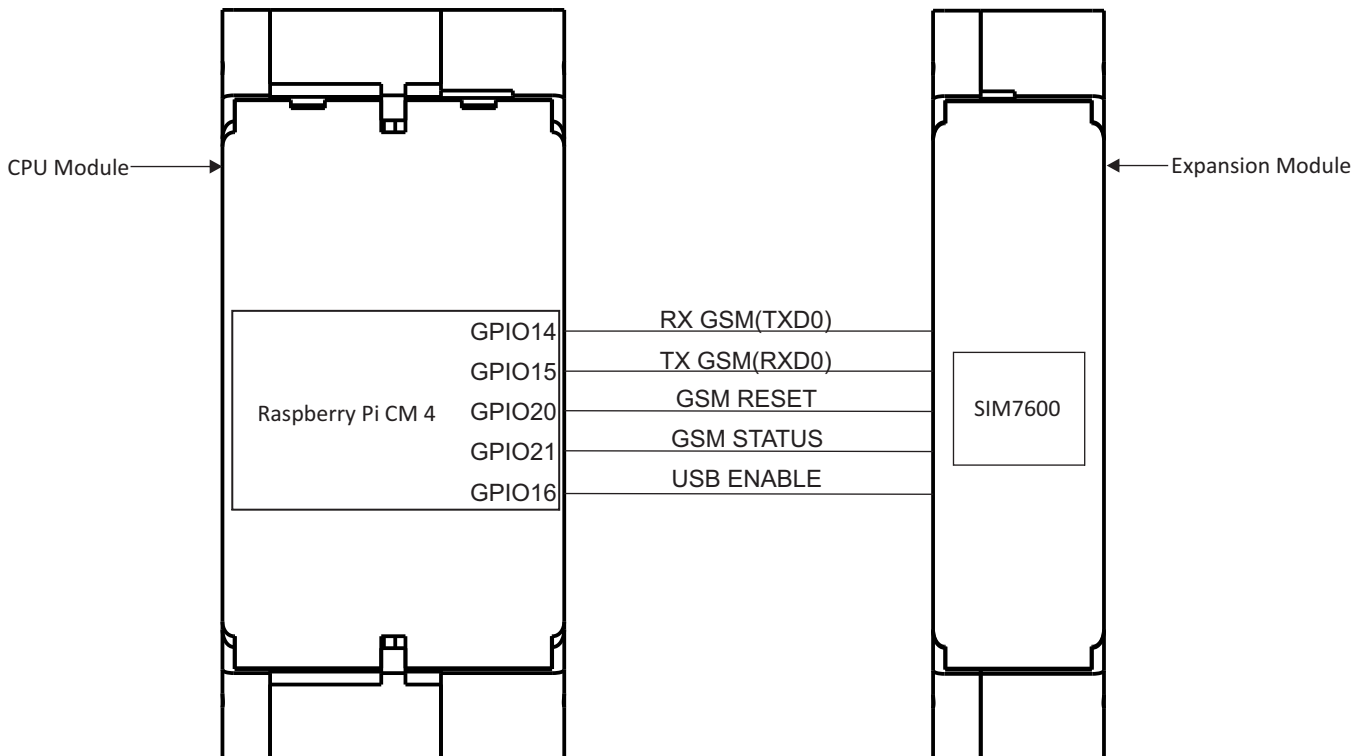


Figure 6: The GPIO connection with CPU module and Expansion Module.

Module Datasheet

Revision History

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	-	-

Technical Support
<https://sensoper.com/support/>

Order Online
<https://sensoper.com/>

Sales Inquiries
<https://sensoper.com/contact-us/>