# Product Test Guide SC-EN-I6-AM4

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Model Name SENSOPER SC-EN-I6-AM4

Product Type Programmable Controller

Manufacturer SENSOPER CONTROLS LLC

Country of Origin Sri Lanka

Certifications EN 61131-2:2007

EN 61010-1:2010+A1:2019 EN IEC 61010-2-201:2018 2014/30/EU- Electromagnetic

Compatibility (EMC)

Annex III, Part B, Module C

# Table of Contents

Title	Page	No
INTRODUCTION	• • •	1
TABLE OF TESTING INSTRUCTIONS	•••	2
	3	3
	4	4

#### **Introduction**

This guide is intended to test the features and the basic operation of the device, SENSOPER SC-EN-I6-AM4 (Current model).



#### **Features**

- 24V Sink/Source Digital Inputs x 8
- 4-20 mA Analog Inputs x 4
- W5500 Ethernet Connectivity x 1
- Micro SD card Support
- 0.96' OLED Display
- 3 Built-in Push Buttons

## <u>Table of Test Instructions</u>

\*\*Flash the test code firmware before testing the device. Follow the instructions given in the  $\underline{\text{Guide to Flash the Test Code Firmware}}$  guide, to flash the binary code.

Testing component/ feature	Test	Expected Output/Outputs
Power	Provide 24V DC supply.	<ul><li>The red LED inside the device glows.</li><li>Display turns on.</li></ul>
Display, Memory card, RTC & W5500 Ethernet Connectivity	<ol> <li>Power-up the device using USB cable or 24V DC supply.</li> <li>Connect the Ethernet cable with the device.</li> </ol>	<ul> <li>Display starts with the SENSOPER logo.</li> <li>Device model is displayed.</li> <li>RTC status is displayed.</li> <li>Memory card status is displayed.</li> <li>The Ethernet connectivity status is displayed.</li> <li>Final screen with Input, Output and Push Button status appears.</li> <li>The output side LED indicators glow in a pattern.</li> </ul>

Digital Inputs	<ol> <li>Power-up the device using 24V DC supply.</li> <li>Connect the GND &amp; COM pins and supply the 24V DC to every digital input one by one.</li> </ol>	<ul> <li>Refer to the expected outputs of the Display Check above.</li> <li>In the input status, status of all the 8 digital inputs will be 1. (As the inputs are internally pulled up)</li> <li>The input status changes from 1 to 0, and the input side LED indicator starts to glow accordingly.</li> </ul>
Push Buttons	Press the 3 push buttons, one at a time.	The 4 digit analog status of the push button is displayed accordingly on the display.  ***  Analog status 1 for the upper button  Analog status 2 for the middle button  Analog status 3 for the lower button

### Current Inputs

 After powering up the device, to check the working of the 4 analog (current) inputs, supply a current between 4-20mA to each current input.

(Check this <u>link</u> for the wire connection)

- Initial status of all the 4 analog inputs will be 0.
- On the display, the current sensed by the SENSOPER device is displayed. (You can confirm these current values using a multimeter.)