

Product Test Guide

SC-EN-I6-R04

30-06-2021

Model Name	SENSOPER SC-EN-I6-R04
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

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Introduction

This guide is intended to test the features and the basic operation of the device, SENSOPER SC-EN-I6-R04 (Relay model).



Features

- 24V Sink/Source Digital Inputs x 8
- 5A Relay Outputs x 4
- W5500 Ethernet Connectivity x 1
- Micro SD card Support
- 0.96' OLED Display
- 3 Built-in Push Buttons

Table of Test Instructions

**Flash the test code firmware before testing the device. Follow the instructions given in the [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 style="list-style-type: none"> • The red LED inside the device glows. • Display turns on.
Display, Memory card, RTC & W5500 Ethernet Connectivity	<ol style="list-style-type: none"> 1. Power-up the device using USB cable or 24V DC supply. 2. Connect the Ethernet cable with the device. 	<ul style="list-style-type: none"> • Display starts with the SENSOPER logo. • Device model is displayed. • RTC status is displayed. • Memory card status is displayed. • The Ethernet connectivity status is displayed. • Final screen with Input, Output and Push Button status appears. • The output side LED indicators glow in a pattern.

<p>Relay Outputs</p>	<p>After powering up the device, to check the working of the relays, a continuity test is done using the multimeter. To do this, keep one end of the multimeter probe on the COM pin on the relay side. Next touch the other end of the probe with the 6 relay pins, one by one after a 15s gap.</p>	<ul style="list-style-type: none"> • The multimeter makes a beep sound, whenever the relay is on (Relay status is indicated by the respective output side LED indicator and the output status on the display).
<p>Digital Inputs</p>	<ol style="list-style-type: none"> 1. Power-up the device using 24V DC supply. 2. Connect the GND & COM pins and supply the 24V DC to every digital input one by one. 	<ul style="list-style-type: none"> • Refer to the expected outputs of the Display Check above. <p>In the input status, status of all the 8 digital inputs will be 1. (As the inputs are internally pulled up)</p> <ul style="list-style-type: none"> • The input status changes from 1 to 0, and the input side LED indicator starts to glow accordingly.

Push Buttons	Press the 3 push buttons, one at a time.	<ul style="list-style-type: none">• The 4 digit analog status of the push button is displayed accordingly on the display. <p>***</p> <p>Analog status 1_ _ _ for the upper button</p> <p>Analog status 2_ _ _ for the middle button</p> <p>Analog status 3_ _ _ for the lower button</p>
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