Product Test Guide
SC-EN-I6-TO4

20-07-2021

Model Name	SENSOPER SC-EN-I6-TO4
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-TO4 (Transistor model).

Features

- 24V Sink/Source Digital Inputs x 8
- Open Collector Transistor 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.	• The red LED inside the device glows. • Display turns on.
Display,Memory card, RTC & W5500 Ethernet Connectivity	1. Power-up the device using USB cable or 24V DC supply. 2. Connect the Ethernet cable with the device.	• 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.

Transistor Outputs	1. To check the working of the transistors, **a voltage test** is done using a multimeter.To do this, keep the positive probe of the multimeter on the +24V pin of the device. Next touch the negative probe with the transistor pins after,one by one after a 15s gap.	• The multimeter shows a 24V DC reading, whenever the transistor is on (Transistor status is displayed on the display).
Digital Inputs	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.	• Refer to the expected outputs of the Display Check above. In the input status, status of all the 8 digital inputs will be 1.(As the inputs are internally pulled up) • The input status changes from 1 to 0, and the input side LED indicator glows accordingly.

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