

# SL1563A EVSE Charging Test Robot – CARD Swiper

Incorporate mechanical actuators in the CCS test automation process



# Incorporate Mechanical Actuators in the CCS Test Automation Process

The Keysight SL156XA EV - EVSE Charging Test Robot Series automates Human Machine Interface (HMI) interactions between Keysight's charging test system and the System Under Test (SUT). The test robots are connected to Keysight's Combined Charging System (CCS) hardware solution, SL1550A EV - EVSE Charging Communication Interface Tester (Com Tester), and incorporate mechanical actuators for HMI-related interaction patterns in the CCS test automation process. The following types are currently available:

- SL1562A EV - EVSE Charging Test Robot – HMI Actuator (HMI Actuator)
- SL1563A EVSE Charging Test Robot – CARD Swiper (CARD Swiper)

Learn more about the CARD Swiper in this data sheet. For information about the HMI Actuator, please see the corresponding data sheet.

## Feature Overview

Benefit from the following features of the CARD Swiper:

- Clamp for RFID card (e.g. credit card format)
- Rotary actuator with a rotation angle of up to 90°
- Concatenate up to five test robots (e.g. one CARD Swiper and up to four HMI Actuators)
- Robust 5-Pin XLR connectors
- Robust plastic case
- Compatible with Keysight TTCN-3 Charging Communication Test Automation Software (CCT)
  - Customizable integration of actuation during charging communication testing sequence
  - Adjustable rotation angle (up to 90°) for each test robot
  - Adjustable timings for each test robot
  - Test calibration of each test robot to simplify the installation of test robots
  - Auto-discovery of test robot type
- Firmware updates can be applied via the SL1550A

# Front/Rear Panel and Interfaces

The CARD Swiper supports an automatic swiping gesture for RFID cards in order to authenticate a charging process at charging stations under test. The front interface provides a clamp to easily attach an RFID tag in credit card format.



Figure 1. SL1563A CARD Swiper front

The back panel provides the system interface to connect the CARD Swiper to the SL1550A via a 5-pin XLR cable.



Figure 2. SL1563A CARD Swiper back

# Technical Data

## System characteristic

System designation	EVSE Charging Test Robot – CARD Swiper
Model number	SL1563A
Dimension (H x W x D)	44 x 37 x 110 mm
Weight	approx. 250 to 350 g

## Interfaces

SUT interfaces	<ul style="list-style-type: none"><li>• Rotary actuator</li><li>• Clamp for e.g. RFID tag in credit card format</li><li>• Adjustable travel (up to approx. 90°)</li></ul>
Mounting interface	<ul style="list-style-type: none"><li>• 3/8"-16 UNC thread</li></ul>
Interfaces	<ul style="list-style-type: none"><li>• 5-Pin XLR-male test robot connector (Provides control interface and power supply)</li><li>• Up to 5 test robots may be concatenated through a Y-cable adapter (SL1560A-003)</li></ul>

## Accessories

- SL1560A-004 Test Robot - long cable (5 m)
  - Connection cable between test robot and SL1550A or between test robots
- SL1560A-005 Test Robot - short cable (1 m)
  - Connection cable between test robot and SL1550A or between test robots
- SL1560A-003 Test Robot - Y-cable
  - Required for concatenation of multiple test robots
- SL1560A-006 Test Robot - Mounting Kit EVSE
  - Includes fixtures with industrial suction pad and clamp-based mounting options
  - One Mounting Kit EVSE is required per test robot

# Extend the Capabilities of your Test Solution

## Meet the SL1550A EV - EVSE Charging Communication Interface Tester

### Perform component-level testing for EV/EVSE communication controllers

The Keysight EV - EVSE Charging Communication Interface Tester (Com Tester) is a fully integrated test adapter for electric vehicle communication controllers (EVCC) or supply equipment communication controllers (SECC) allowing equipment emulation or test case execution to test charging communication and protocols.



**Figure 3.** SL1550A EV - EVSE Charging Communication Interface Tester

With the Com Tester, you can perform component-level testing for development tests, type approval tests, manufacturing tests (end-of-line), and hardware-in-the-loop tests.

Find out more about SL1550A Com Tester [here](#).