



# SensCal™ Pro

## Test equipment for Calibration of programmable angular position sensors for Automotive parts



**SensCal™** is a tester specifically designed for the mass production of angular position sensors, as widely used in throttle bodies, variable nozzle turbocharger, 3-way valves and more.

**SensCal™** is a compact solution, that allows both an easy integration into production lines and a turn key solution for stand alone test stations

### MAIN FEATURES:

- ❑ Built-in MQTT 5.0 client for Industry 4.0 conformance.
- ❑ Up to 8 output, for different device pinouts.
- ❑ External reference position measurement with High Resolution Encoder.
- ❑ Sensor's Multi-vendor platform.
- ❑ 2 analog inputs for Torque and air flow measurement
- ❑ Actuator control for angular and linear applications with Constant PWM, Constant Speed and Fixed Position
- ❑ Real time graphs during the measurements
- ❑ Work cycle controlled by assembly line's PLC.
- ❑ Integrated controller to exchange data in Profinet, Profibus, Ethercat, Modbus TCP/IP protocols.
- ❑ Database for traceability.

### TECHNICAL SPECIFICATIONS

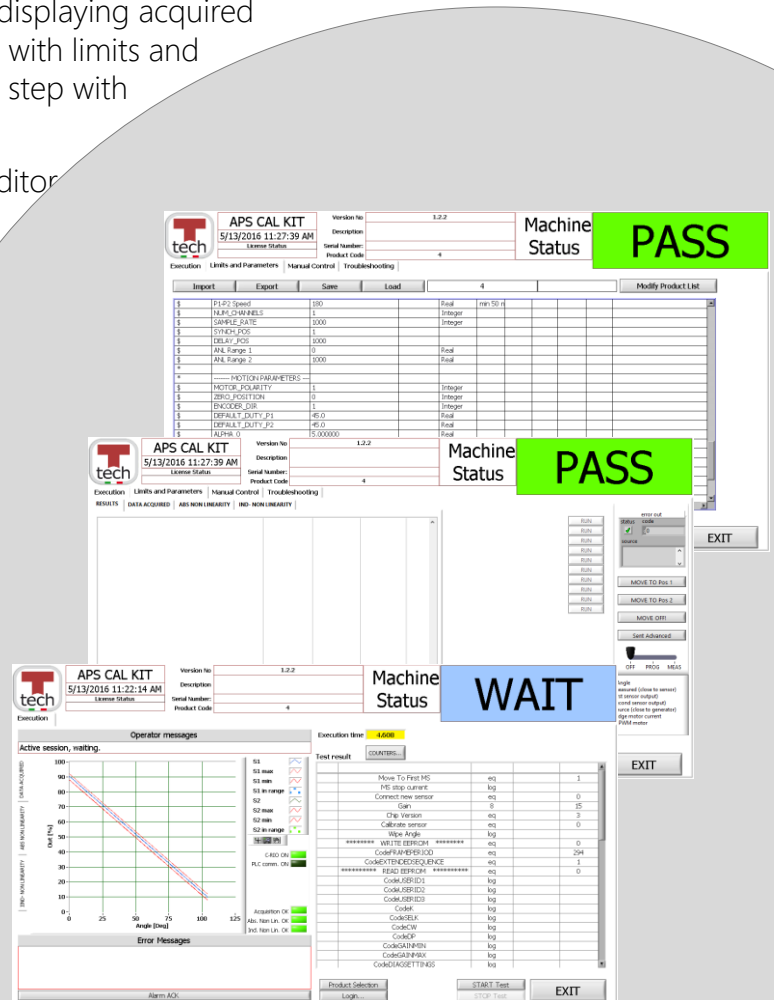
Specification	Details	Notes
Reference Measurement	Incremental encoder resolution. Channel output type.	Programmable up to 65535 ppr A, B, line driver.
Motor Drive	Output Voltage Max Output Current Safety	12 VDC 5 A (8 A pulse) Two-contact emergency stop.
Sensor measurement	Output Voltage Voltage Accuracy Measurement Rate. Output type.	5 V DC 0.02% (for analog output) 1000 measurements per second. Analog - PWM - SENT (SAE J2716)



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## SOFTWARE FEATURES

- Applicative software with easy user interface displaying acquired curve with relative boundaries, test sequence with limits and measured values, pass fail indication for each step with different background color
- Manual operation panel and test sequence editor under password
- Customizable test sequence to perform sensor programming, data acquisition and automatic boundaries check
- Simultaneous Acquisition of: Encoder Vdd; S1; S2; (Analog / SENT / PWM) Optional signals
- Dynamic Calibration with real time data acquisition during the whole course of the sensor
- Automatic Calibration Sequences (Program Default Memory Map; Offset Correction @ Zero Position; Curve Calibration; Check of Absolute & Independent Linearity, Micro Linearity Hysteresis; Lock and Final Check)
- Sensor EEPROM parameters fully customizable and Memory dump with log for each part
- Test Report saved for each part
- Database for Traceability (MySQL Database; Tool for Statistic Analysis)



## APPLICATIONS

- Mass production of Vehicles components like Throttle Bodies, Variable nozzle turbocharger, Three-way valves.

## CONFIGURATIONS AND OPTIONS

Product Code	Description
SensCal.Pro	Manage Sensors with up to 2 Channels with Analog, PWM and SENT output
SensCal.ProEOL	SW plug-in for End Of Line additional test steps