

Product Document



Demo Kit Manual

POS-IoT-DK

Reference Board

POS-IoT-DK

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1 Introduction

2 General Description

This Manual explains how to use the POS-IoT-DK.

The POS-IoT-DK is a demo kit for ams Magnetic Position Sensors. It allows us to show all the features of ams AS5600 rotary position sensor in combination with the very useful Simblee Bluetooth module of RF digital. The demo is powered with a CR2032 battery. The demo consists of the demo PCB, a plastic magnet holder, a rotary magnet knob and a mobile Application which enables you to get full access of the sensor over your smartphone. After connecting the Demo PCB with your smartphone you can read and write all registers of AS5600.

This demo shows how easy it is to access ams magnetic position sensors even with a mobile device by using the Bluetooth module of RF digital.

Figure 1: POS-IoT-DK



3 Hardware

3.1 Kit Content

Table 1: POS-IoT-DK Content

Part	Description	Picture
Demo PCB	POS-IoT-DK Demo PCB with silicone case	
Magnet holder	Plastic holder for the mechanical connection from the magnet to the demo pcb	
Magnet Knob	Magnetic knob to show features of AS5600	
Quick Start Guide	First steps introduction	
Simblee App	Application for mobile devices (iOS/Android) to get full access of AS5600 on a mobile device	

4 Getting started

- 1) Unbox the Demo kit and all necessary components
- 2) Switch the Power switch on the Demo PCB to ON -> Green LED lights up
- 3) Scan QR Code on the Quickstartguide or in this manual (see below) and download the “Simblee for mobile” App with your mobile device
- 4) Start the “Simblee for mobile” App
- 5) Set the magnet holder + magnet knob on the pcb, so that the holder will fit into the holes on the pcb
- 6) Start using POS-IoT-DK

5 Software

The software consists of:

- Simblee App (for iOS & Android)
- POS-IoT-DK GUI (using AS5600)

5.1 Simblee App

To get the Simblee app on your smartphone scan this QR-Code



With the Simblee for mobile app you can navigate through the AS5600-POS-IoT-DK-GUI

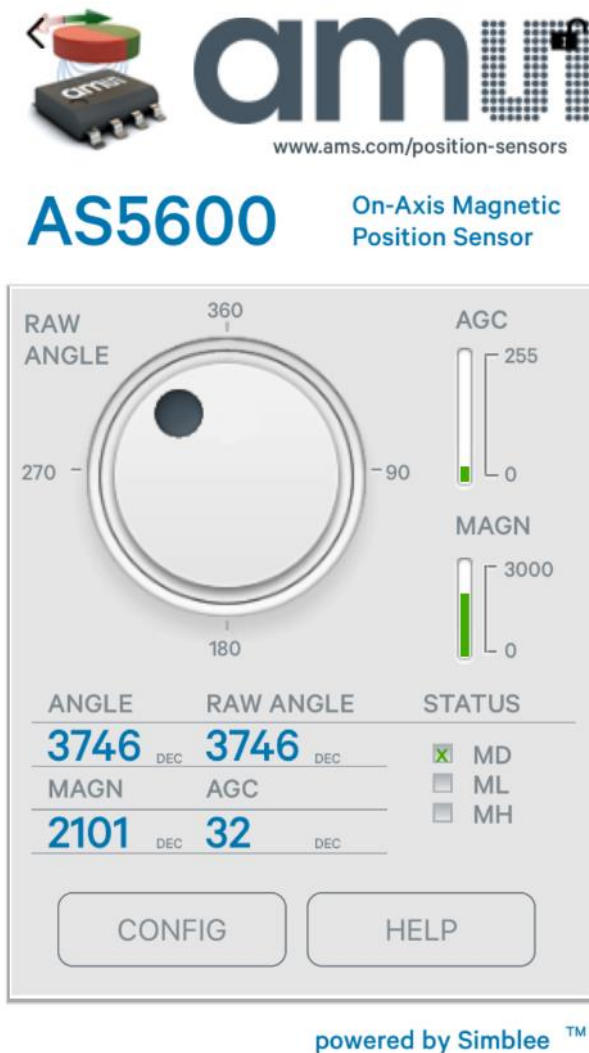
5.2 POS-IoT-DK GUI

	Description	Comment
5.2.1	Demo GUI Main page	Overview of Angle, Magnitude and AGC + Rotary knob
5.2.2	Demo GUI Help page	Explanation to the sensor
5.2.3	Demo GUI Config page	Overview of angle information + ZPOS/MPOS settings
5.2.4	Demo GUI Register page	Read/ Write option of all registers

5.2.1 Demo GUI Main page

Here the actual position value can be read out as well as AGC and magnitude. Additionally the status bits and the zero position is displayed.

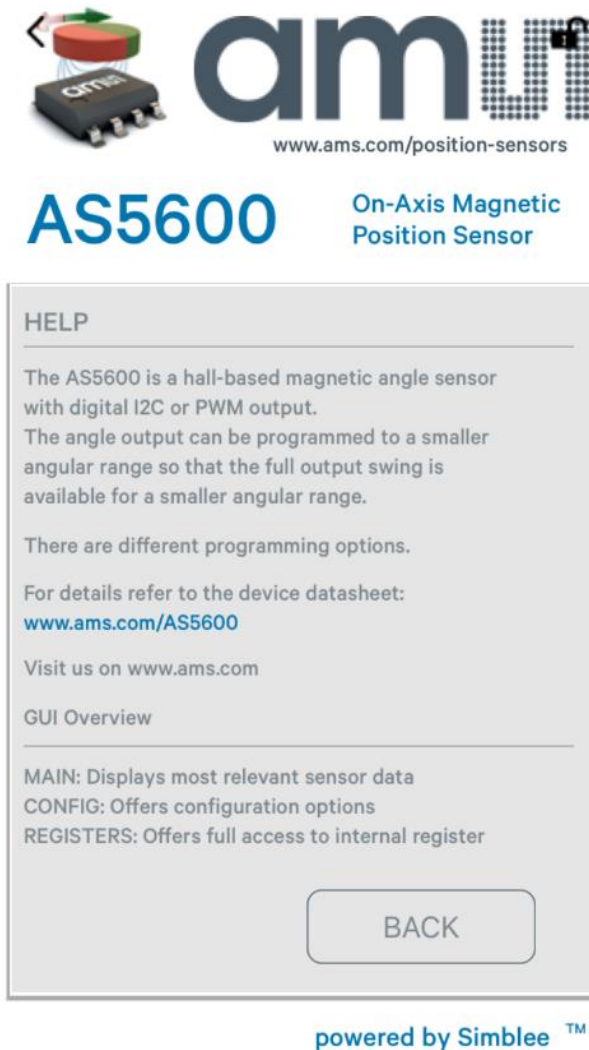
Figure 2: Demo GUI Main Page



5.2.2 Demo GUI Help page

Here some useful information to AS5600 position sensor can be found

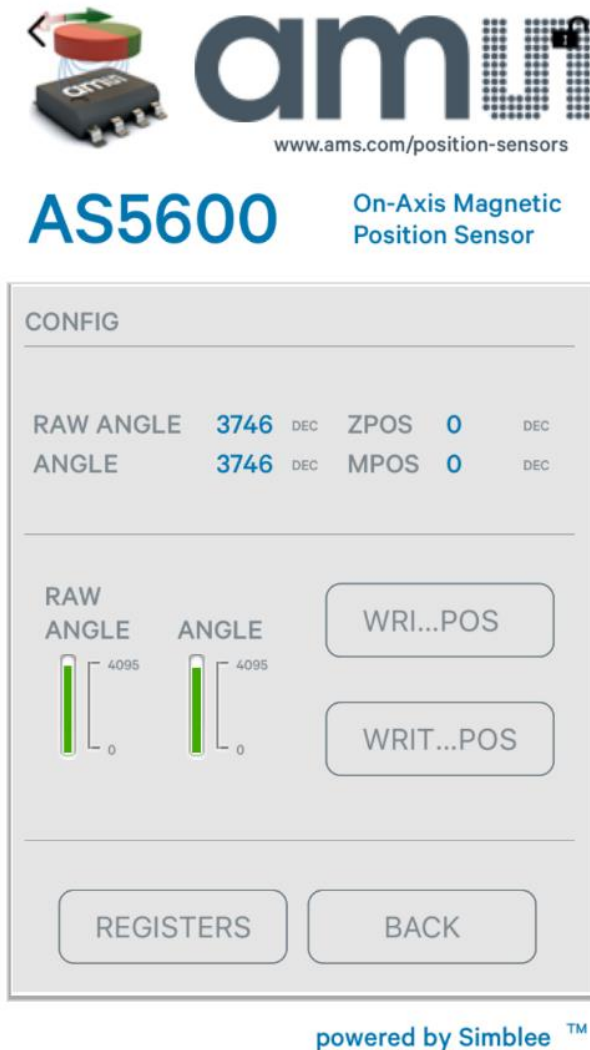
Figure 3: Demo GUI Help page



5.2.3 Demo GUI Config page

This page shows the current zero and maximum position + the possibility to set this to the actual position value.

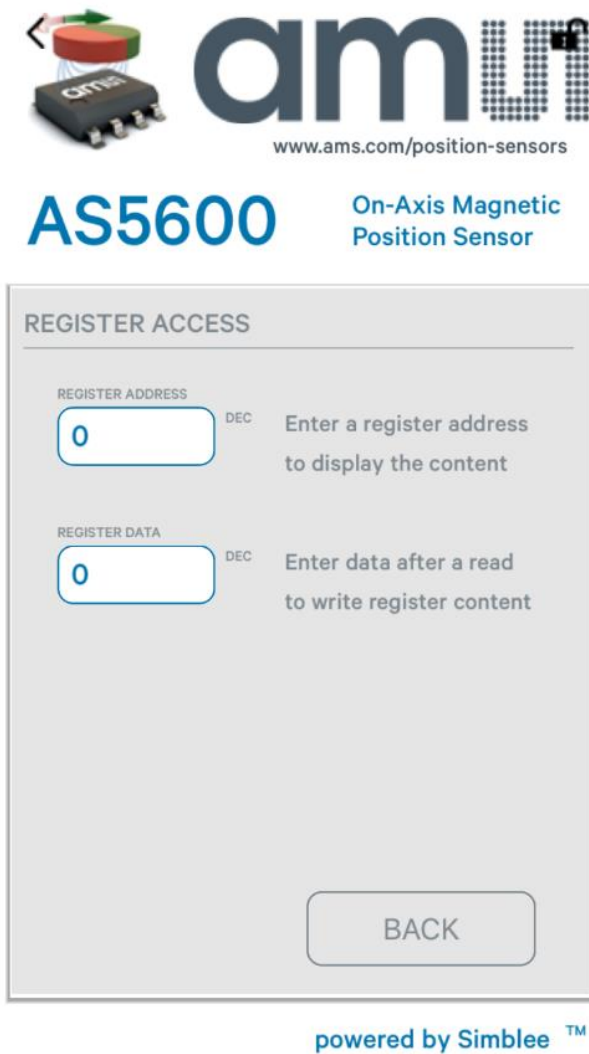
Figure 4: Demo GUI Config page



5.2.4 Demo GUI Register page

Here a read/write of all AS5600 registers is possible (for register map please refer to AS5600 Datasheet)

Figure 5: Demo GUI Register page



amun
www.ams.com/position-sensors

AS5600 On-Axis Magnetic Position Sensor

REGISTER ACCESS

REGISTER ADDRESS DEC Enter a register address to display the content

REGISTER DATA DEC Enter data after a read to write register content

BACK

powered by Simblee™

6 Ordering & Contact Information

Ordering Code	Description
POS-IoT-DK	POS-IoT-DK Demo Kit Reference Board

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8 Revision Information

Changes from previous version to current revision 1-00 (2017-Oct-10)	Page
Initial version 1-00 (azen)	

Note: Page numbers for the previous version may differ from page numbers in the current revision.
Correction of typographical errors is not explicitly mentioned.