

# BSCiDEA Development Kit



## Features

Dielectric elastomers, known for their capacity to transform electrical energy into linear motion, represent a potential game-changer in the realm of IoT actuators. Unlike conventional electric motors, these elastomers operate with minimal energy consumption and exhibit remarkable resilience to environmental factors like temperature and vibration. The BSCiDEA Development Kit is poised to provide not only the linear actuator but also an electronic control unit equipped with a web interface and IoT connectivity. Additionally, it includes a battery-free EnOcean wireless switch for effortless, "plug and play" operation. The BSCiDEA development kit allows comprehensive evaluation and quick prototyping of innovative DEA based mechatronic solutions.

## Contents

- 2 x DEA stacks capable of up to 2mm movement with a force of up to 20N.
- Evaluation board with real-time movement display at a 5:1 scale and adjustable external force.
- Electronic control unit with integrated Wi-Fi and EnOcean radio interface and separate high-voltage power supply.
- Battery-free EnOcean radio switch for seamless actuation of the Development Kit.
- Web interface for convenient control and parameter adjustment via smartphone, tablet, or PC, including end positions, dynamic movement, and waypoint control (0-100%).

## Technical Specifications

DEA stack size: .....	10 x 10 x 20mm
Max DEA Operating Voltage: .....	typ. 800V
DEA Features: .....	up to 2mm movement, up to 20N
Controls Unit Connectivity: .....	EnOcean, WLAN: 802.11 b/g/n 2.4GHz
Power Supply: .....	Micro-USB 2.0
Power Consumption: .....	max. 2,4W at 5VDC

**Development Kit for laboratory use only**

**Order Information**

**BSCiDEA Development Kit**  
 Product: ..... BSCiDEA  
 Item No.: .....77966  
 Packaging: .....Plastic Case