# FIDES AC-DC CONVERTER

### **Disruptive Innovation to smart IoT sustainable AC POWER**

### Novel Methodology Magnetic field harvesting AC - DC Solid States Valley fill with GFCI Switch

Tangible benefits in terms of reliability, Free maintenance, Small size and operating in extreme temperature environments





# **1. IoT Magnetic Field Harvesting Power Supply**

### Sustainable electric energy power supply



### What is the problem in smart meter? Sustainability, Reliability, Durability.

### **1. Custom-made Function Modules**

Sustainable Magnetic Field Harvesting Power Supply Novel Technology



### **1. Custom-made Function Modules**

Sustainable Magnetic Field Harvesting Power Supply Novel Technology

- FIDES can design and manufacture custom-made Function Modules with special function, shape and rational design, based on the specific circuitry from the customer.
- Function Modules is available with either miniature molded semiconductors or chip-bonded semiconductors for high density mounting.
- Custom-made "Function Modules" is to be designed and manufactured in the following stages:

### 3. Custom made Function Modules

#### **Model of Power Product Concept**

**Customer's Product Concept** 

Customer's Power Technology AC-DC Power Module In / Out Voltage, Current / Min Voltage, Quantities...

FIDES's Solution Technology Application UHV Solid Capacitor Technology Magnetic Field Harvesting Power FIDES Standby Zero IEC62301-1

**Novel Sustainable Power Products** 

### 2. Custom-made Function Modules

### **Custom order process**



Inquiring with circuit drawing, specific parts required, quantity basis, delivery schedule.

Pricing, structure, shape, dimension, etc. (Generally within 7 days)

Start of designing, Information on test method/regulations function of circuit requested.

Generally 10 pcs. of samples are to be submitted. (Generally within 4 weeks)

In case samples found good, final specifications for approval are to be submitted.

Final approval on samples and specifications

### 3. Custom made Function Modules

#### **Order information**

INDISPENSABLE INFORMATION		NEEDFUL INFORMATION	INFORMATION FOR A MORE STRICT ESTIMATE	
CIRCUIT	• CIRCUIT DRAWING • SPECIFIC PARTS SHOULD BE USED • QUANTITY BASIS	<ul> <li>PART CAN BE SUBSTITUTE</li> <li>DESCRIPTION OF CIRCUIT FUNCTION</li> <li>TEST METHOD / REGULATION SPECIFICATION</li> </ul>	• CIRCUIT DRAWING SURROUNDING TO THE SUBJECTED CIRCUIT • DESCRIPTION OF SYSTEM FUNCTION	
STRUCTURE INFORMATION	• STRUCTURE, DIMENSION, SHAPE REQUIREMENTS	• DIMENSION LAYOUT • APPLICABLE SPECIFICATION • APPEARANCE REQUIREMENT	• STRUCTURE INFORMATION OF MODULE	
RELIABILITY	• PURPOSE OF USE	AMBIENT CONDITIONS     INFORMATION     QUALITY ASSURANCE     REQUIREMENT     SCREENING REQUIREMENT	•WHETHER SPECIAL CONTRACT IS REQUIRED	
PRODUCT INFORMATION	• ANNUAL USAGE • MASS-PRODUCTION STARTING DATE	• TARGET LIFE TIME • DEVELOPING SCHEDULE • NEW PROJECT OR CURRENT MODEL	• TOTAL USAGE OF OTHER UNIT INCLUDED • PAST USAGE	

#### Notice:

Confidential information given by the customer will be strictly kept secret without permission in writing.

## **1. IoT Electrocity Power**

### **Standard Type Module**

#### Exterior and Measurement Map (unit : mm)



SIP type is resin coating for small space, and DIP type is resin case, steer cover and resin coating for low profile application.

Output Power	Input Voltage	Output Voltage	Output Current	Part Number	Note

FIG1. FIDES-Mx APPLICATION:

