# PRODUCT DATASHEET

# Confidex Ironside Flag™



Excellent performance and IP69K rated robustness combined with a unique single-screw attachment

### **ELECTRICAL SPECIFICATION**

### **Device type**

UHF RFID / EPCglobal Gen2v2

### **Operational frequency**

Global 865-928 MHz

#### IC type

Impinj M $780^{\text{TM}}$ 

### Memory configuration

EPC 496 bit; User 128 bit; TID 96 bit

#### **EPC** memory content

Unique number encoded as a default

#### Read range (2W ERP)\*

On metal up 18m / 59 ft

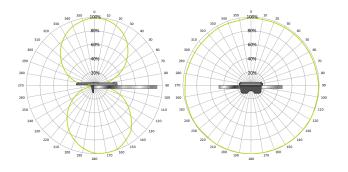
On plastic up 7m / 23 ft

### Applicable surface materials\*

Optimized for metallic surfaces but may be used also on other materials.

### RADIATION PATTERNS

Radiation pattern is heavily affected by the shape of the tagged asset. Testing in real environment is recommended to find the best orientation and location for the tag.



### MECHANICAL SPECIFICATION

#### Tag materials

High quality thermoplastic elastomer

#### Weight

5,5 g

### **Delivery format**

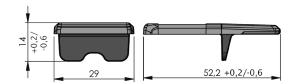
Single

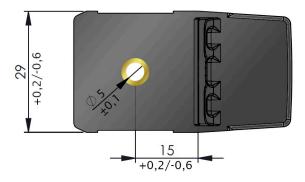
#### Amount in box

500

#### Tag dimensions

52,2 x 29 x 14 mm / 2.1 x 1.1 x 0.55 in (+0,2/-0,6mm)





### **ENVIRONMENTAL RESISTANCE**

#### **Operating temperature**

-40°C to +85°C / -40°F to +185°F

### Peak temperature

+140°C / +284°F for 10min

### Water resistance

IP69K

## Weather ability

Excellent, including UV-resistance and sea water

### **Chemical resistance**

No performance changes in:

- 168h NaOH (10%, pH 13)
- 168h Sulfuric Acid (10%, pH 2)
- 168h Motor oil
- 168h Salt water (salinity 10%)
- 2h Acetone

### **Storage condition**

1 year in +20°C / 50% RH

#### **Expected lifetime**

Years in normal operating conditions

Values in the table are the best recommendations; resistance against environmental conditions depends on the combination of all influencing factors, exposure duration and chemical concentrations. Thus, product's final suitability for certain environmental conditions is recommended to be tested. Contact Confidex for more specific information.

<sup>\*</sup> Read ranges are theoretical values that are calculated for non-reflective environment, in where antennas with optimum directivity are used with maximum allowed operating power according to ETSI EN 302 208 (2W ERP). Different surface materials may have an effect on performance.

## PERSONALIZATION OPTIONS

#### Pre-encoding

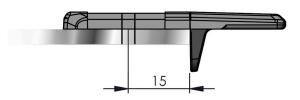
Customer specific encoding of EPC or user memory. Locking permanently or with password.

#### **Customized laser engraving**

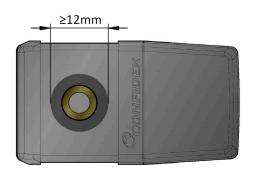
Customer specific layout including logo, text, numbers.

### **INSTALLATION INSTRUCTIONS**

Mechanical fixing is recommended in any application that includes a risk for mechanical stress. During fixing make sure there is no air gap left in between the surface and the tag. Note that the attachment hole should be located 15mm from the metal edge.



Attachment is made easier with the included metallic limiter that can withstand high torque. It is still recommended to use the screw or rivet with head size of at least 12mm (1/2 inch).



Performance of Ironside Flag may vary depending on installation location. Therefore it is recommended to test the optimal location for the tagged asset. You may also contact Confidex for recommendations

### ORDER INFORMATION

Product number: 3004421

**Product name:** Confidex Ironside Flag™ M780

For other versions, additional information and technical support contact Confidex Ltd.

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