PRODUCT DATASHEET
Confidex Ferrowave Classic™

Generic on metal RFID label optimized for packaging and component tracking

ELECTRICAL SPECIFICATION

Device type
UHF RFID / EPCglobal Gen2v2

Operational frequency
ETSI: 865 - 869MHz
FCC: 902 - 928 MHz

IC type
Impinj Monza R6-P
Impinj Monza 4E

Memory configuration
Monza R6-P: EPC 96/128 bit; User 32/64 bit; TID 96 bit
Monza 4E: EPC 496 bit; User 128 bit; TID 96 bit

EPC memory content
Monza R6-P: Unique EPC in every label
Monza 4E: Same EPC in every label

Read range (2W ERP)*

<table>
<thead>
<tr>
<th>Surface</th>
<th>Monza R6-P</th>
<th>Monza 4E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ETSI</td>
<td>FCC</td>
</tr>
<tr>
<td>Metal</td>
<td>4m / 13ft</td>
<td>5m / 16ft</td>
</tr>
<tr>
<td>Liquid</td>
<td>2m / 7ft</td>
<td>2m / 7ft</td>
</tr>
<tr>
<td>Plastic</td>
<td>5m / 16ft</td>
<td>8m / 26ft</td>
</tr>
<tr>
<td>Glass</td>
<td>12m / 40ft</td>
<td>12m / 40ft</td>
</tr>
<tr>
<td>Cardboard</td>
<td>4m / 13ft</td>
<td>6m / 20ft</td>
</tr>
</tbody>
</table>

* 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 will have an effect on performance so testing in final application is recommended.
ENVIRONMENTAL RESISTANCE

Operating temperature
-35°C to +85°C / -31°F to +185°F

Peak temperature
+110°C / 230°F for 10min

Water resistance
IP68, tested for 5 hours in 1m deep water

Washing resistance
Tolerates washing with standard solvents. Washing process should be tested in final application.

Chemical resistance
No physical or performance changes in:
• 168h Motor oil exposure
• 168h Saltwater (salinity 10%) exposure
• 24h Sulfuric acid (10%, pH 2) exposure
• 24h NaOH (10%, pH 13) exposure

Acetone should be avoided

Storage condition
1 year in +20°C / 50% RH

Environmental values are the best recommendations; resistance against different 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.

INSTALLATION INSTRUCTIONS

When attaching the label ensure the following
• Select a smooth surface without uneven areas below tag
• Avoid touching the background adhesive and IC location

When mounting the label with its adhesive, clean and dry the surface for obtaining the maximum bond strength. Typical cleaning solvents are heptane or acetone for oily surfaces or isopropyl alcohol for plastics. Do not use household cleaning solvents that contain oils. Carefully read and follow the manufacturer’s precautions and directions for use when working with solvents.

Ideal application temperature is from +17°C to +30°C (+62°F to +86°F), bond strength can be improved with firm application pressure and moderate heating up to 50°C (122°F). Application at temperatures below 15°C (59°F) is not recommended.

Minimum recommended bending diameter of the Confidex Ferrowave Classic™ is 100mm. Smaller diameters are recommended to be tested in final application. For optimal performance please bend the label in the orientation shown below.

PRINTER COMPATIBILITY

The Confidex Ferrowave Classic is tested and verified to work with Zebra ZT410 RFID Silverline printer.

ORDER INFORMATION

Product number: 3003132
Product name: Confidex Ferrowave Classic™ MR6-P ETSI

Product number: 3003130
Product name: Confidex Ferrowave Classic™ MR6-P FCC

Product number: 3003093
Product name: Confidex Ferrowave Classic™ M4E ETSI

Product number: 3003091
Product name: Confidex Ferrowave Classic™ M4E FCC

For additional information and technical support, please contact Confidex Ltd.

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