

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

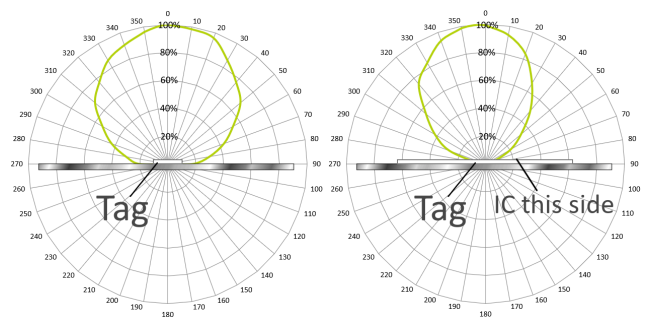
Monza 4E: Same EPC in every label

Read range (2W ERP)*

Surface	Monza R6-P		Monza 4E	
	ETSI	FCC	ETSI	FCC
Metal	4m / 13ft	5m / 16ft	3m / 10ft	4m / 13ft
Liquid	2m / 7ft	2m / 7ft	-	1m / 3ft
Plastic	5m / 16ft	8m / 26ft	-	1m / 3ft
Glass	12m / 40ft	12m / 40ft	1m / 3ft	1m / 3ft
Cardboard	4m / 13ft	6m / 20ft	-	1m / 3ft

* 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.

RADIATION PATTERNS



MECHANICAL SPECIFICATION

Label surface

Printable white PET, resin ribbon recommended

Background adhesive

High performance acrylic adhesive

Weight

0,8 g

Delivery format

800 pcs good labels on reel, bad ones marked with "XXX" printing.

Pitch on reel

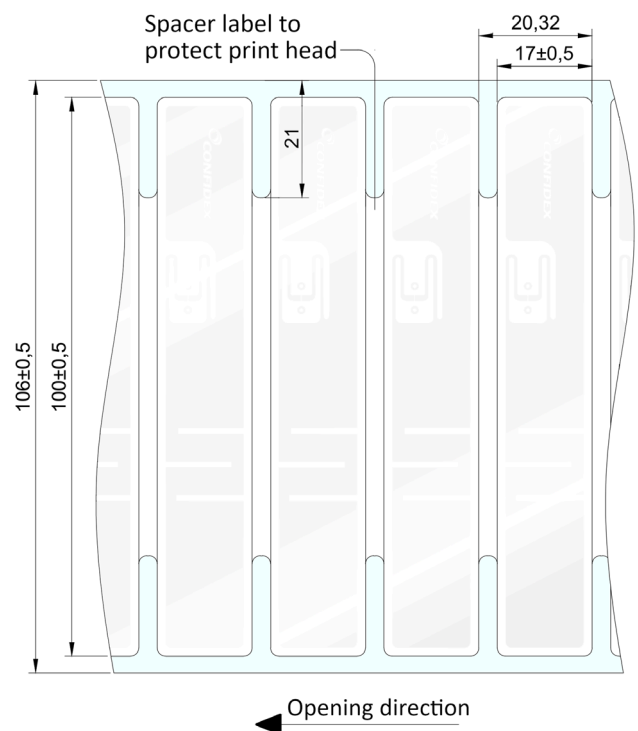
20,32 mm / 0.8"

Reel core inner diameter

76 mm / 3"

Tag dimensions

100 x 17 x 1,1 mm / 3.94 x 0.67 x 0.04



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

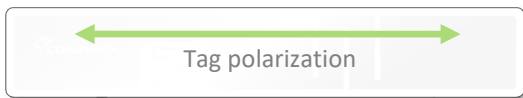
Acetone should be avoided

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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