

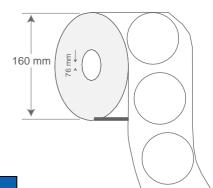
SMART RFID LABELS MicroAir -C



ESB Sistemas MicroAir-C is a small sized circular white PET label designed for application on a wide range of non-metallic objects, offering global performance even on frequency detuning materials like cardboard & plastic. Its circular shape makes it easy & quick to apply, especially when trying to align the label to the corners of the object, making it ideal for deployment across a multitude of applications.

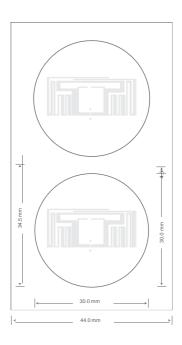
TYPICAL APPLICATIONS

- Pharmaceutical
- Cosmetics & beauty products
- Indoor Asset Management



PHYSICAL SPECIFICATION

Face Stock	Printable white, PET resin ribbon is recommended
Label Sizes	Dia 30 mm / 1.18 in, Thickness 0.2 mm / 0.01 in
Adhesive	High performance permanent adhesive with excellent bonding to a variety of substrates
Weight	0.2 gm
Delivery Format	On reel
No. of Labels/ Reel	2000 pcs
Label Pitch	34.5 mm / 1.3 in
Core Inner Diameter	76 mm / 3 in
Roll Outer Diameter	160 mm / 6.3 in

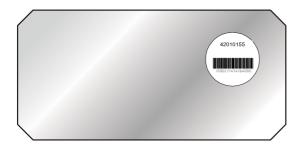


RF SPECIFICATION

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Mode of Operation	Passive	
Device type	Class 1 Gen 2 Passive UHF RFID transponder	
Air interface protocol	EPC Global Class 1 Gen 2 ISO 18000-6C	
Operational frequency	Global 860-960 MHz	
IC type*	NXP UCODE 8	
Memory configuration	EPC Size 96 - 128 Bits	
Write cycle endurance	100,000	
Data Retention	Upto 20 years	
Read range (2W ERP)**	ETSI: On Plastic 3.5 m / 11.5 ft, On Cardboard 2.5 m/8.2 ft FCC : On Plastic 3.5 m / 11.5 ft, On Cardboard 2.5 m/8.2 ft	
Applicable Surface Materials	Non-metallic surfaces	

ENVIRONMENTAL RESISTANCE		
Operating Temperature	-20°C to +70°C / -4°F to +158°F	
Withstands Exposure To	95% humidity, 60°C × 100 h, 50% humidity, 80°C × 100 h	
Peak Temperature	+100°C for 1 hr, +80°C for 100 hrs (Label remains securely attached with object. No physical or performance changes observed)	
Adhesive Service Temperature	-20°C to +85°C / -4°F to +185°F	
Recommended Application Temperature	+10°C to +38°C	
Water Resistance	IP67	
Chemical Resistance	No physical or performance changes in: - 168 h Salt water (salinity 10%) exposure - 168 h Motor oil exposure - 12 h NaOH (10%) exposure - 30 min Acetone exposure	
Ideal Storage Condition	+23°C / 50% RH	
Expected Lifetime	Years in normal operating conditions	

PRODUCT INSTALLATION



- Ensure the application surface is not uneven and is clean and dry, to obtain maximum bond strength. If required, use approved cleaning solvents to clean surface.
- Avoid touching the backside of the label while mounting it

PERSONALIZATION OPTIONS

Pre-encoding

• Customer specific encoding of EPC

Customized Printing

• Customer specific layout including logo, text, numbers, barcodes etc.

ORDER INFORMATION

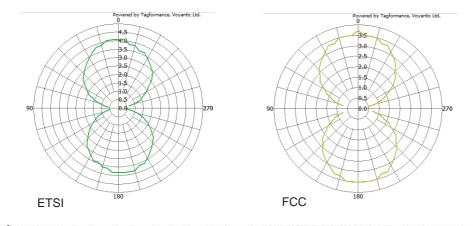
Part Number

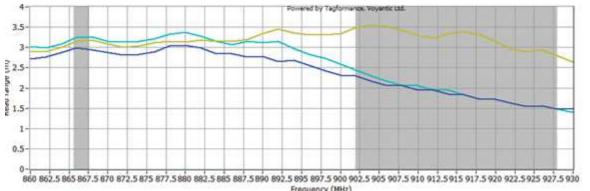
• 42010155

Roll Sizes

• 2000 Labels per Roll / 4 Rolls per Carton

RADIATION PATTERN & READ RANGE GRAPH (ETSI & FCC)







* Other IC's available on request **The indicated read range values are measured in our laboratory testing environment, where antennas with optimum directivity are used with maximum allowed operating power. Different surface materials and environments may exhibit different results.

