SMART RFID LABELS

Flagpole U9

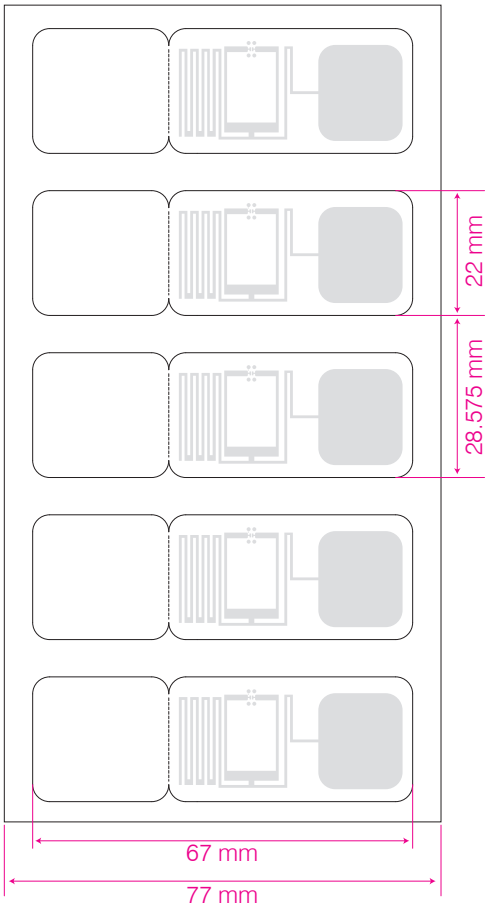
SIVA's Flagpole is a UHF label designed for attachment to challenging metallic items where low cost item level-tracking is required. The label provides excellent read range of up to 10 meters.

The Flagpole features a form factor with a total size of 67 x 22 mm and with a final tag size of 43 x 22 mm after folding. The high-performance permanent adhesive ensures that the label is firmly attached and has good bonding on metalic assets. These tags can be supplied with customer specific encoding of EPC and can be custom printed with logos, text, etc.

TYPICAL APPLICATIONS

- Retail: Apparel, Item-level tracking
- Supply Chain & Logistics: Asset Management
- Industrial: Metal assets, structural steel and RTI's

PHYSICAL SPECIFICATION	
Face Stock	Printable white, PET
Tag Dimensions	Before Folding (Total): 67 x 22 mm After Folding (Total): 43 x 22 mm
Adhesive	High performance permanent adhesive with excellent bonding
Weight	0.5 gm
Delivery Format	Roll Form
No. of Labels/ Reel	2000 pcs
Label Pitch	28.575 mm
Core Inner Diameter	76 mm / 3 in
Roll Outer Diameter	189 mm / 7.44 in



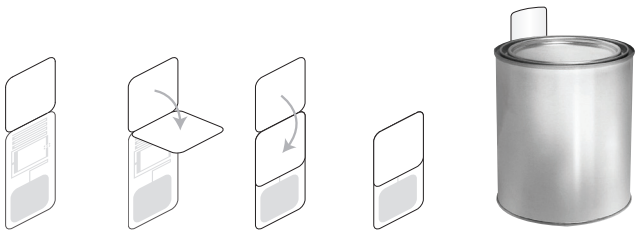
RF SPECIFICATION

Mode of Operation	Passive
Device type	Class 1 Gen 2 Passive UHF RFID transponder
Air interface protocol	EPC Gen2v2.1
Operational frequency	Global 860-960 MHz
IC type*	NXP UCODE 9
Memory configuration	96-bit of EPC memory with 48-bit unique serial number factory-encoded into TID
Write cycle endurance	100,000
Data Retention	Upto 20 years
Read range (2W ERP)**	ETSI: 14m on Metal Plate, 18 m on Plyer, 8.5 on Metal CAN FCC: 16m on Metal Plate, 17.5 m on Plyer, 7.8 on Metal CAN
Applicable Surface Materials	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
Recommended Application Temperature	+10°C to +38°C / 50°F to +100.4°F
Water Resistance	IP67
Chemical Resistance	Resistant to chemical solvents and moisture
Ideal Storage Condition	+23°C / 50% RH
Expected Lifetime	Years in normal operating conditions

PRODUCT INSTALLATION



- Ensure the application surface clean and dry, to obtain maximum bond strength. If required, use approved cleaning solvents to clean surface
- Peel off the label from the release liner and fold the short side of the tag along the perforation line so that, half of the tag is covered.
- At last, visible part of the Tag will be applied to the metallic surface of the object, allowing the folded flag to protrude out.

PERSONALIZATION OPTIONS

Pre-encoding

- Customer specific encoding of EPC

Customized Printing

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

ORDER INFORMATION

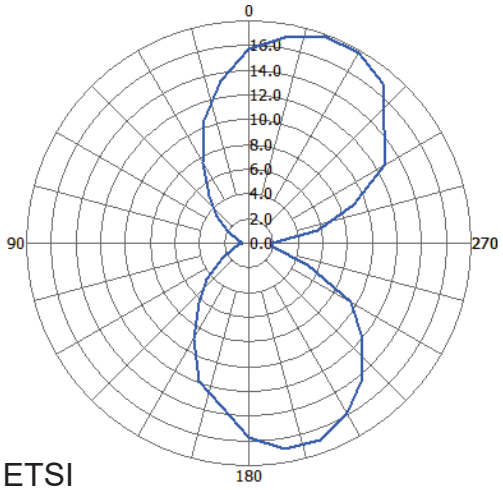
Part Number

- RF.Li.TT.Flgple

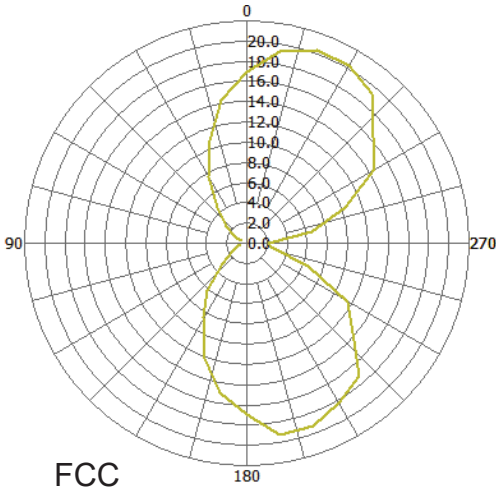
Roll Sizes

- 2000 Labels per Roll / 4 Rolls per Carton

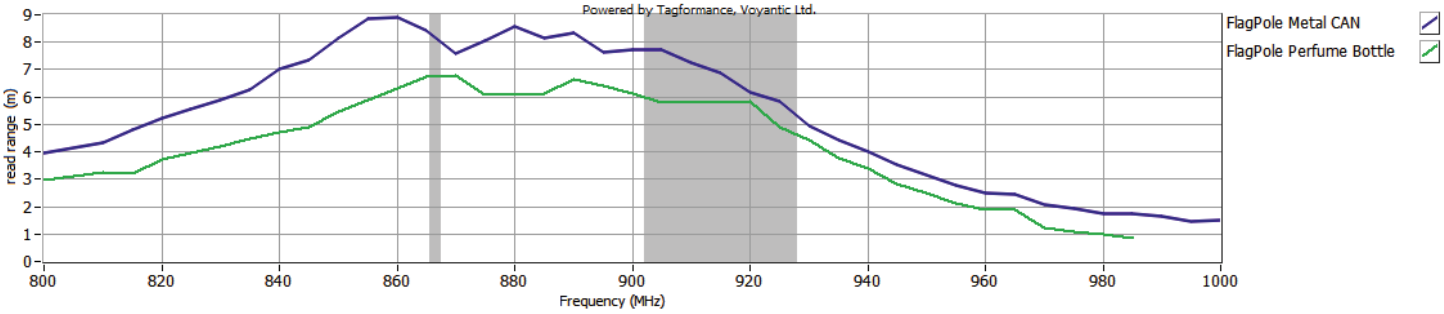
RADIATION PATTERN & READ RANGE GRAPH (ETSI & FCC)



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.

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