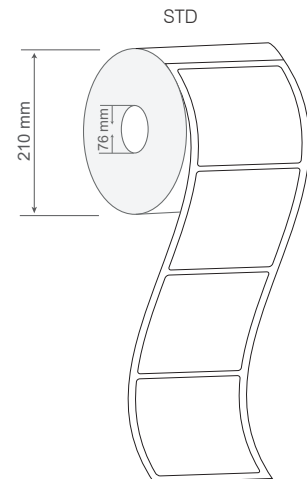
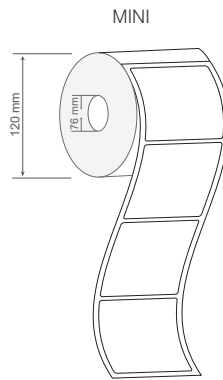


SIVA's Aerial Zenith label is an easy to deploy RAIN(UHF) RFID label and especially designed for outdoor environment with strong grip on different kinds of objects, enabling new applications and revolutionizing integration into manufacturing and supply chain processes.

These labels are supplied in roll form as either finished labels. SIVA's Aerial Zenith labels have been optimized to provide high read reliability, thermal barcode printers compatibility and enable low cost hassle-free RFID deployment.

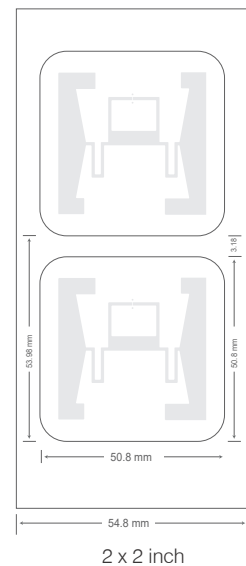
TYPICAL APPLICATIONS

- Shipping Labels
- Packaging
- Logistics
- Baggage Tagging
- Warehouse Operations
- Manufacturing and Supply Chain
- Inventory Management & Asset Tracking



PHYSICAL SPECIFICATION

| | | |
|---------------------|---|------------------------|
| Face Stock | Printable white PET, resin ribbon is recommended | |
| Label Sizes | 50.8 x 50.8 x 0.2 mm 2 x 2 x 0.01 in | |
| Adhesive | High performance permanent adhesive with excellent bonding to a variety of substrates | |
| Weight | 0.42 gms | |
| Delivery Format | On reel | |
| No. of Labels/ Reel | std: 2000 pcs | mini: 500 pcs |
| Label Pitch | 53.98 mm / 2.125 in | |
| Core Inner Diameter | 76 mm / 3 in | |
| Roll Outer Diameter | std: 210 mm / 8.26 in | mini: 120 mm / 4.72 in |



RF SPECIFICATION

| | |
|------------------------------|---|
| 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 | Upto 128 bits |
| Write cycle endurance | Minimum 100,000 |
| Data Retention | Upto 20 years |
| Applicable Surface Materials | Non-Metallic surfaces |
| Read range (2W ERP)** | ETSI : On Plastic 17 m / 55.77 ft FCC : On Plastic 12.5 m / 41.01 ft |

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.) |
| Recommended Application Temperature | +10°C to +38°C / 50°F to +100.4°F |
| Adhesive Service Temperature | -20°C to +85°C / -4°F to +185°F |
| 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

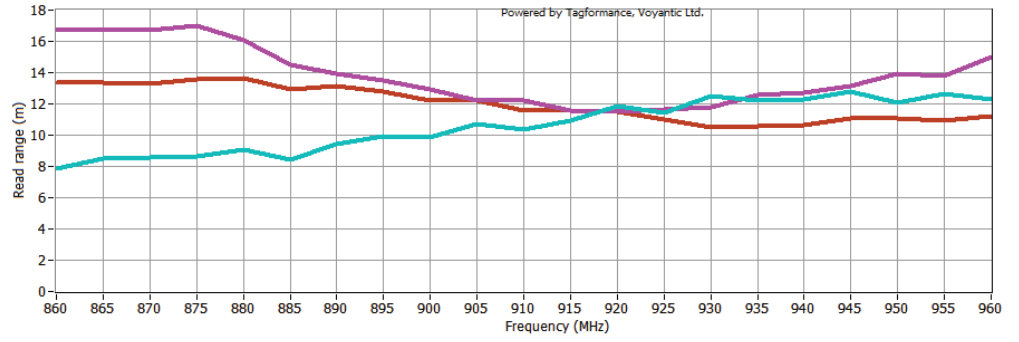
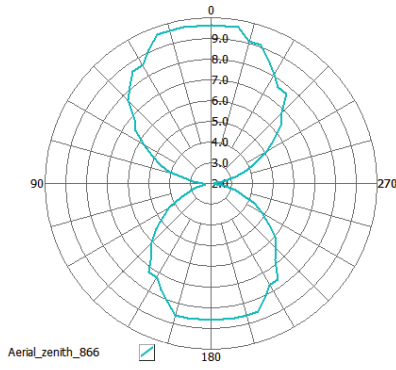
Part Number




- RF.Li.TT.Arl-Zenith

Roll Sizes

- std: 2000 Labels per Roll / 4 Rolls per Carton
- mini: 500 Labels per Roll

RADIATION PATTRN AND READ RANGE GRAPH



Aerial_Zenith_Free_Air 
 Aerial_Zenith_Plastic 
 Aerial_Zenith_Cardboard 

* 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.



Version : 301120.01