



# RFID Label Vortex NXP UCODE 8 White Wet

## Specification Sheet

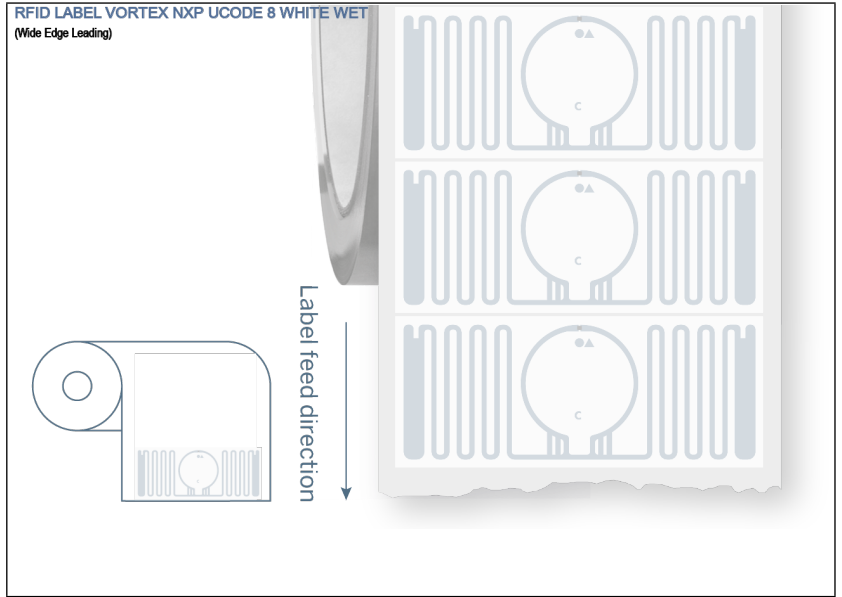


### PROFILE

Product Description: **RFID Label Vortex NXP UCODE 8 White Wet**  
 Dimensions (WxH): 44 mm X 18 mm (0.709" X 1.732")  
 Antenna material: AL(10um)+PET50(um)

### DESCRIPTION

Checkpoint's Vortex RFID EPC Label is an RFID field programmable EPC data carrier designed for Merchandise Visibility applications. Vortex delivers high read rate performance in semi-automated physical inventory control and RFID as EAS. Vortex is ISO18000-6C compliant and can be encoded and printed to carry EPC data in several formats - RFID EPC global protocol, printed bar code and human readable text. Checkpoint's Vortex RFID adhesive label is the solution for all of your global supply chain merchandise visibility needs. From @Source solutions to in-store point of sale and EAS programs, Checkpoint has the product portfolio to meet your requirements.



### RFID SPECIFICATIONS

Protocol: ISO/IEC18000-6C and EPC Global Gen 2v2  
 Operating Frequency: 860 - 960 Mhz  
 Chip Type: NXP UCODE 8  
 IC life: 100000 write cycles, 50 years data retention.  
 Unique TID: 48 bits (Read Only)  
 EPC Memory: 128 bits (Read & Write)  
 Kill Password: 32 bits (Read & Write)  
 Access Password: 32 bits (Read & Write)

### PERFORMANCE

ETSI Read Range: 12.30 m  
 FCC Read Range: 8.00 m  
 Operating Temperature: 10 °C to 40 °C (-12 °F to 4 °F)  
 Operating Humidity: 20 to 80 %  
 Storage Temperature: 18 °C to 28 °C (-8 °F to -2 °F)  
 Storage Humidity: 40 to 60 %  
 Loop tack(st.st) - FTM9: 20.46  
 20min 90 peel - FTM2: 12.75  
 24hours 90 peel - FTM2: 13.52  
 Quality: 100% Read Tested

### LABEL SPECIFICATIONS

Label Width (Cross Web): 44 mm (1.732")  
 Label Length (Machine Direction): 18 mm (0.709")  
 Label Repeat: 21.59  
 Liner Width: 47 mm (1.85")  
 Face Stock: 80 gram Thermal Transfer Material  
 Adhesive: Permanent

### DELIVERY AND PACKAGING

Labels Per Roll: 10000  
 Inlay Orientation: Machine Direction Orientation: Chip Trailing Label Facing Out  
 Rolls Per Package: 5  
 Certifications: RoHS  
 Part Numbers: 9529274  
 Leadtime: weeks ex-works CN

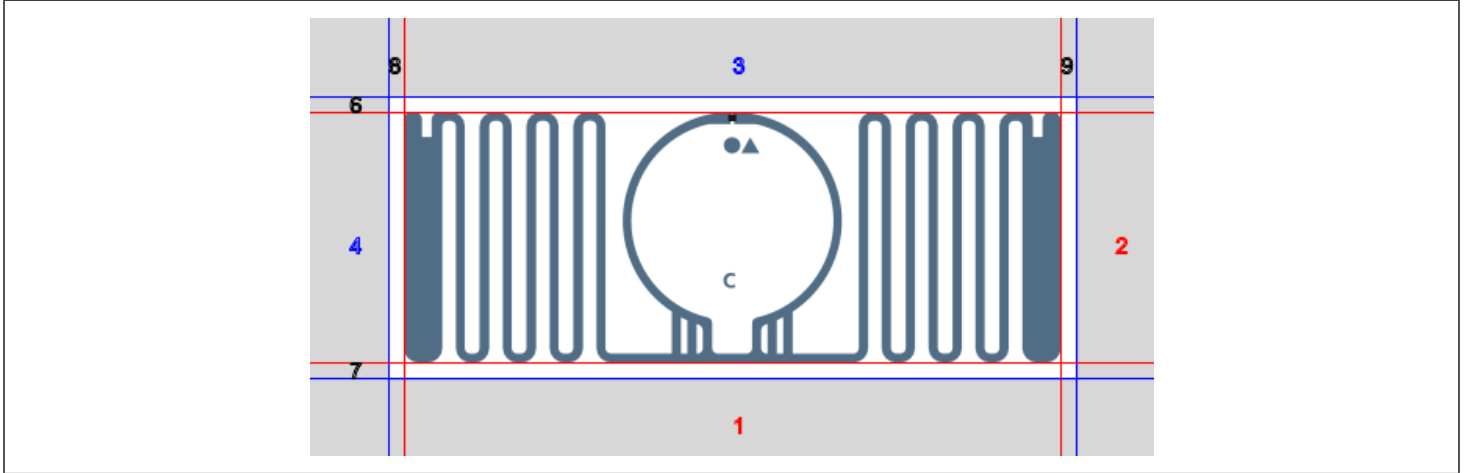
### ARC CATEGORIES

TARGET SPEC (G)  
 ETSI APPAREL (K)  
 FCC JEWELRY (Q)





### DIMENSIONS



No	Item	Parameters	No	Item	Parameters
1.	Antenna Width:	42.00 mm ± 0.20 mm	10.	Wet Inlay Corner Radius	1.00 mm ± 0.20 mm
2.	Antenna Length:	16.00 mm ± 0.20 mm	11.	White Wet Gap	3.59 mm ± 1.00 mm
3.	Inlay Width:	44.00 mm ± 0.50 mm	12.	Wet Inlay Edge To Liner Edge(TOP)	1.50 mm ± 1.50 mm
4.	Inlay Length:	18.00 mm ± 0.50 mm	13.	Wet Inlay Edge To Liner Edge (Bottom)	1.50 mm ± 1.50 mm
5.	Wet Inlay Pitch:		14.	Liner Length	47.00 mm ± 1.00 mm
6.	Antenna Top Edge To Wet Inlay Edge):	1.00 mm ± 1.00 mm	15.	Core Inside Diameter	76.20 mm ± 0.50 mm
7.	Antenna Bottom Edge To Wet Inlay Edge:	1.00 mm ± 1.00 mm	16.	Roll Outside Diameter	270.00 mm
8.	Antenna Left Edge To Wet Inlay Edge:	1.00 mm ± 1.00 mm			
9.	Antenna Right Edge To Wet Inlay Edge:	1.00 mm ± 1.00 mm			

### PACKAGING

Packaging Method:	Rolls
Roll count:	10000
Rolls per Carton:	5





### GENERAL RFID PRODUCT RECOMMENDATIONS

1. Tags are electronic devices with sensitive RF properties and can break if not handled with care.
2. Make sure that the application of tags follows the correct procedures to ensure highest performance and quality.
3. Metallic or conductive materials are not suitable for RFID labels as they may weaken RF performance.
4. Handling of RFID products shall be performed by trained personnel only. In case of doubt, please consult your closest Checkpoint Systems RFID supplier.

### RFID IN A WORK ENVIRONMENT

In order to avoid IC damage due to static electricity or climatic conditions (temperature and humidity), the following changes can be made to working environment:

- Coat the floor with an antistatic layer, at least on the working platforms.
- Check the air humidity (40-60% RH) and temperature. (20 to 24°C)
- If there is not air conditioning in the production facility, isolate the RFID department and install up-to date air conditioning in that area.
- All employees should wear ESD (electrostatic discharge) clothing and shoes.
- Every time someone touches a roll of inlays, he or she should be grounded.

### RECOMMENDATIONS FOR HANDLING AND PACKAGING RFID PRODUCTS

Handling before or during converting/printing:

- Do not open the inlay roll package unnecessarily.
- Open the package only in the RFID facility.
- Do not touch the IC side of the inlay if you are not connected to the ground.
- Try to use the whole roll in one pass.
- If using the whole roll is not possible, put the roll back into the original package, seal it and take it back to storage.
- Do not damage or drop the roll.
- Always keep inlay reels on their side.
- Do not lay rolls on top of inlays.
- Inspect traceability label on the roll and yield prior to converting.
- Review inlay specification for delivery format.

### HANDLING AFTER CONVERTING/PRINTING

- Handle the product with care.
- Finish and pack the product directly after inserting.
- When stored, hang the reel from the core or place it on a pallet with a soft underlay.
- Do not wind reels too tight.
- Always keep inlay reels on their side.
- Do not stack pallets or too many RFID products on top of each other.
- Do not roll mother rolls or ready coils on the floor, carry them or use a trolley.
- Keep the working environment tidy and clean.

### PACKAGING

- Use a strong package that protects the product well against the moisture.
- Lock rolls with a center shaft or chucks to prevent them from gliding in the box during transport.
- Packaging material must not create static electricity load when handled.