INNOTAG SERIES

EndurWave™ Pro

UHF RFID label designed for returnable and reusable food packaging, withstanding microwave heating and repeated dishwasher cycles while maintaining reliable read performance.

PHYSICAL SPECIFICATION

Face Material
Printable white PET, resin ribbon is recommended*

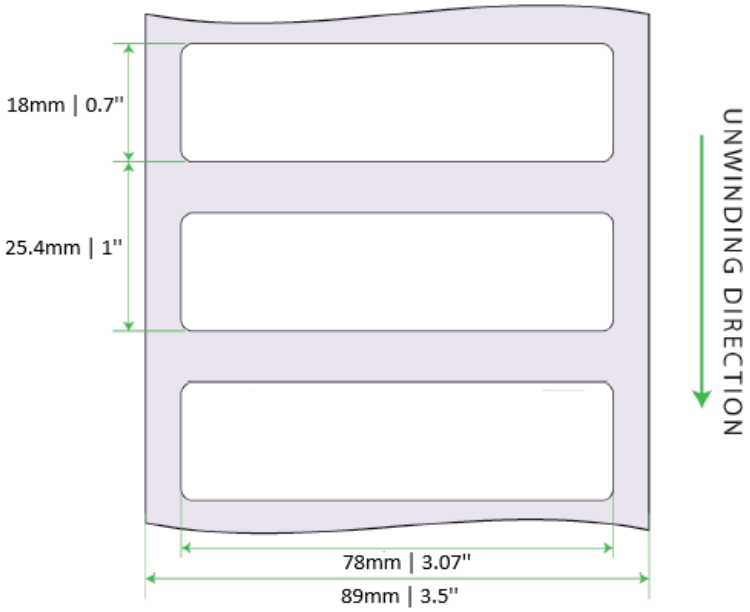
Label Size
78 x 18 x 0.2 mm | 3.07" x 0.7" x 0.007"

Adhesive
High performance acrylic adhesive provides high bond to most surfaces, including low surface energy plastics

Delivery Format
2000 pcs of good label on reel (Bad labels marked with ● printing)

Label Pitch
25.4 mm | 1"

Core Inner Diameter
76 mm / 3"



RF SPECIFICATION

Air interface protocol
ISO 18000-6C and EPC Global Gen2v2 complaint | Rain RFID

Operational frequency
Global: 865-928 MHz

IC
Impinj M830

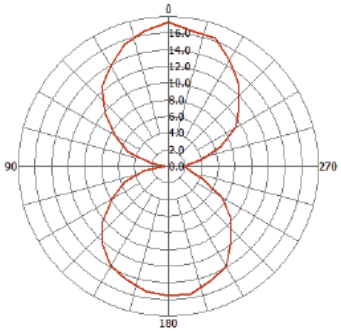
Memory configuration
EPC 128bit; TID 96bit

Applicable Surface Materials
Non-Metallic Surfaces

Read range (2W ERP)**

	Meter	Feet
On Plastic	17	55.77
On Glass	6	19.68
On Ceramic	8	26.24

RADIATION PATTERN



ENVIRONMENTAL RESISTANCE

Operating Temperature
-40°C to +85°C | -40°F to +185°F

Installation Temperature
+10°C to +38°C | 50°F to +100.4°F

Washing resistance
Tested up to 50 cycles according with detergents and water temperature between 55°C and 75°C.

IP Classification
IP68

Storage condition
1 year in +20°C / 50% RH (shelf life for adhesive)

Expected Lifetime
Years in normal operating conditions

* For ribbon recommendation please contact iotorders@sivagroup.co
** 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.

RECOMMENDED MICROWAVE USE PARAMETERS

Parameters	Recommended Values		
Microwave Wattage	950 W	1200 W	1800 W
Max. Cook Duration	5 min	4 min	2 min

EndurWave Pro is designed for use in microwaveable packaging application under the following tested and recommended criteria.
- Label Placement: On the side of the food packaging (not top or bottom)
- Min. Product Volume: 8oz (approx. 227g)
- Microwave Power Setting: As per power rating and duration specified in the table above
- Pass Criteria: No arching or sparking, No ignition

Disclaimer: SIVA will not be liable for i) any misuse of the product ii) any changes or modifications to the product iii) any unforeseen use of the product i. SIVA's liability shall be limited to the replacement of the product and SIVA shall have no liability for any damages, including any special, indirect or consequential damages.

PRODUCT INSTALLATION

• Apply only on microwave-compatible containers.

• Ensure the application surface is clean, dry and preferably even, to obtain maximum bond strength.

• Avoid touching the backside of the label and IC location while mounting it.

• Minimum bending diameter of the label is 50 mm. Do not bend the label below this limit.

SIVA *recommends each user to make their own tests to verify the product's suitability for their use case.* SIVA *does not represent that this product is fit for any particular purpose or use.*

PRINTER COMPATABILITY

Compatible for printing and encoding using 4" & 6" wide industrial grade thermal transfer UHF printers.

Sensor type: Gap

As tested on Zebra ZT400 series, SATO CL4 NX series Printronix T6000 series

For setup instructions and printer configurations contact iotsales@sivagroup.co

PERSONALISATION OPTIONS

Pre-encoding
• Customer specific encoding of EPC memory

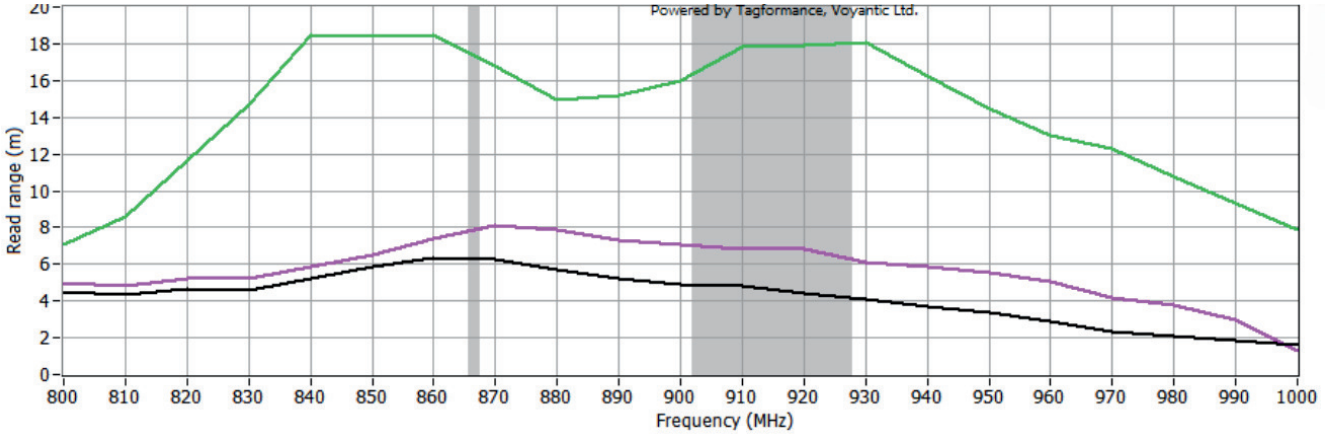
Customised Printing
• Customer specific artwork including logo & text, numbers, barcodes in black.
• Colour artwork imprint + transparent over-lamination. MOQ is 10k.

ORDER INFORMATION

Part Number
• RF.EWP.7818.M830

Packaging
• 2000 pcs per box;
4 boxes per carton

READ RANGE GRAPH



- EndurWave Pro On Plastic
- EndurWave Pro On Ceramic
- EndurWave Pro On Glass

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