

SMART RFID LABELS

Re-Load Pro50



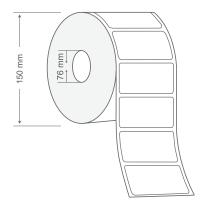
Syndicate Re-load Pro50 is a washable UHF label designed for application on plastic crates & pallets. These labels feature a strong adhesive, suitable for application on objects with low surface energy. .

Returnable plastic containers undergo repeated washing processes and Re-load Pro50 is designed to resist typical washing cycles.

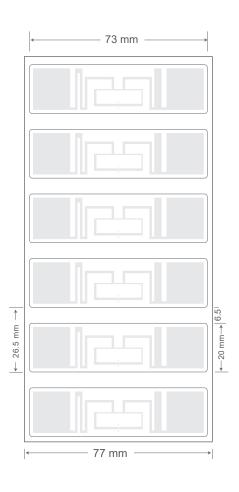
Syndicate Re-load Pro50 is delivered in a reel format and comes with an optional transparent over lamination for enhanced chemical resistance and image durability.

TYPICAL APPLICATIONS

- Plastic RTI's
- Hospital Assets
- Non metallic outdoor Assets



PHYSICAL SPECIFICATION	
Substrate Material	Special Plastic film
Tag Dimensions	73.0 x 20.0 x 0.2 mm 2.87 x 0.79 x 0.01 in
Adhesive	High performance permanent adhesive with excellent bonding to a variety of substrates
Weight	0.345 g
Delivery format	On reel
No. of Labels/ Reel	2000 pcs
Label Pitch	26.5 mm / 1.08 in
Core inner diameter	76 mm / 3 in
Roll outer diameter	150 mm / 5.90 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	EPC Size 96 - 128 Bits
Write Cycle Endurance	100,000
Data Retention	Upto 20 years
Applicable Surface Materials	Non-metallic surfaces
Read Range **	ETSI: 12 m / 39.37 ft FCC: 14 m / 13.12 ft

ENVIRONMENTAL RESISTANCE	
Operating Temperature	-20°C to +70°C / -4°F to +158°F
Withstands Exposure To	95% humidity, 60°C $ imes$ 100 h, 50% humidity, 80°C $ imes$ 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 / 50°F to +100.4°F
Water Resistance	IP68, tested for 5 hours in 1m deep water
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

The label comes with an optional special transparent PET laminate construction, enabling reverse printing of artwork and variable data.

ORDER INFORMATION

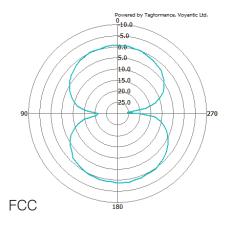
Part Number

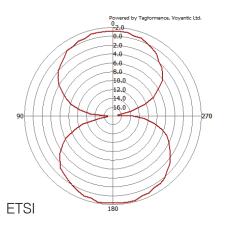
• RF.Li.TT.RLPro.50.U8

Roll Sizes

• 2000 Labels per Roll / 4 Rolls per Carton

RADIATION PATTERN & READ RANGE GRAPH (ETSI & FCC)







Free Air — PTFE — 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.