45×18mm Avery Dennison® ARC Certified NXP® Impinj® M830 RFID Label

UHF | ISO/IEC 18000-6C | EPC Global Gen2V2 | 45 x 18 mm



Key Features

Operating Frequency
UHF 860-960 MHz

Chip Type
Impinj® M830

Communication Protocol
ISO/IEC 18000-6C, EPC Global Gen2v2

EPC Memory
128 bits

TID Memory
96 bits

Read Range
Up to 24 m

1. Product Overview

AD Miniweb M830 FCC label is a compact (45×18 mm) RFID solution for global retail, industrial, and supply-chain use. It delivers strong performance on hard-to-tag, low-detuning materials such as cardboard and plastic, and in close-coupled environments. Powered by Impinj® M830, it offers 128 bits of EPC memory and a self-adjusting feature that automatically optimizes performance in challenging conditions. It has passed the ARC categories defined by Auburn University's RFID Research Center for FCC retail performance.

2. Product Parameters

2.1 Physical Characteristics

SKU	AD Miniweb M830 FCC
Material	Coated Paper
Label Size	45×18 mm
Antenna Size	42×16 mm

2.2 Technical Parameters

Operating Frequency	860-960 MHz
Communication Protocol	ISO/IEC 18000-6C, EPC Global Gen2v2
Read Range	Up to 24 m
ARC Specs	O, Q, R, W5, W6, Y2
Certificate	ARC
ESD Voltage Immunity	Max. 2000V(HBM)
Operating Mode	Passive

2.3 Chip Characteristics

Chip Manufacturer	Impinj®
Chip Type	Impinj® M830
Data Retention	10 years
EPC Memory	128 bits
User Memory	0 bits
TID Memory	96 bits
Access&Kill Password	32 bits
Write Endurance	10,000 times
Read Sensitivity	-25.5 dBm
Write Sensitivity	-20 dBm

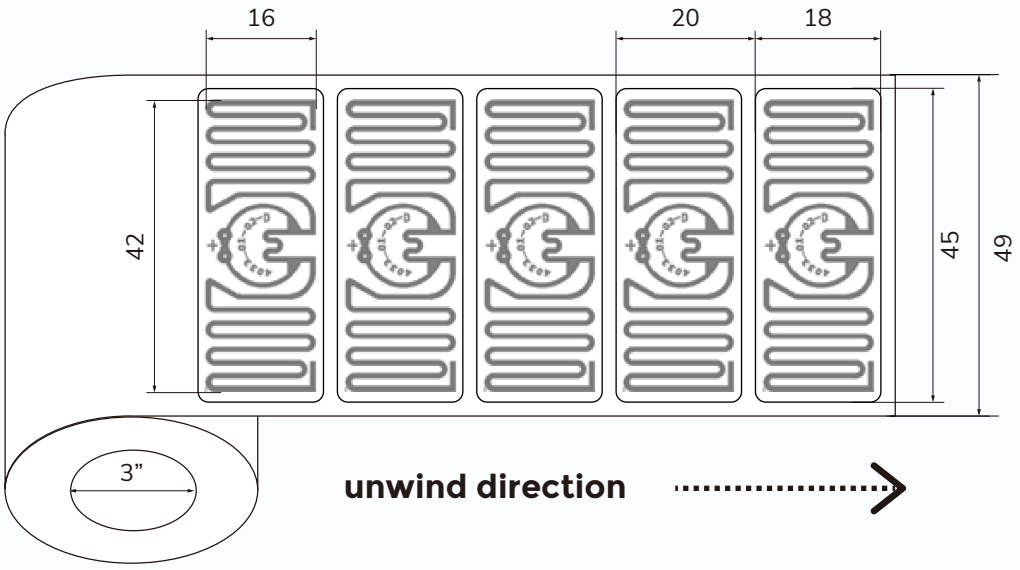
2.4 Additional Information

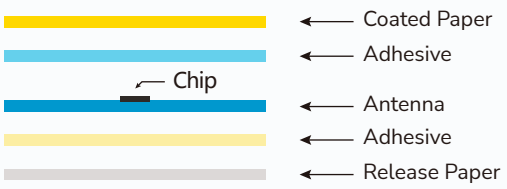
Operating Environment	-40°C~+85°C, 20%~80% RH
Storage Environment	+18°C~+28°C, 40%~60% RH
Handling Precautions	1. Do not bend. 2. Keep away from water and collision. 3. Labels with black-dot marks are bad ones, do not use.

2.5 Packaging

Packing Format	Packed in roll, vacuumed packing in ESD bag
Roll OD	Max. 230 mm
Core ID	3 inch(76.2 ± 0.50 mm)
Packing Quantity	5000 pcs/roll (3 kg/roll)

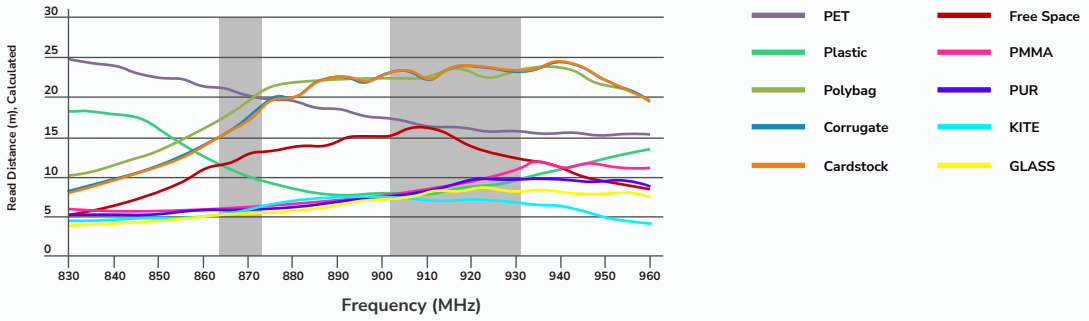
3. Label Dimensions



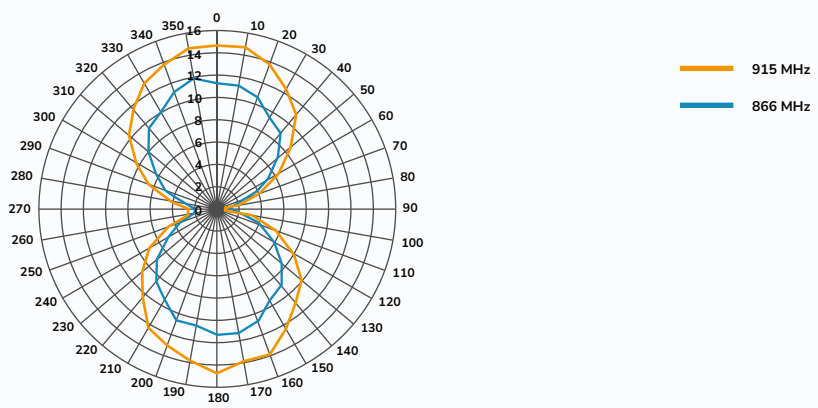


4. Testing Graphs

4.1 Reading Range Under Different Frequency



4.2 Orientation Sensitivity



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