



EOS-500 M830

# TAGEOS

## Datasheet

### Reliable Solution for Use on Several Dielectric Materials



TAGEOS

EOS-500 M830 provides robust performance on materials with varying dielectric loads. Featuring superior read-ranges globally, the inlay is a solution of choice for inventory visibility and other applications in industrial manufacturing, logistics, and supply chain management.

EOS-500 is based on Impinj's M830 RAIN RFID IC with 128-bit EPC memory. The IC combines improved read sensitivity (-1.5 dB, compared to M730), AutoTune™ performance, and backscatter efficiency with a size reduction to support Tageos' sustainability approach. As a result, the IC sets standards in solutions like high-speed inventory counting, loss prevention with frictionless self-checkout, and embedded tagging with seamless product returns.

EOS-500 M830 is available in dry, wet, and paperface delivery formats.

Tageos was one of the first companies to qualify for ARC Quality Certification for its manufacturing operations from Auburn University RFID Lab.

Like all Tageos' RFID inlays and tags, EOS-500 M830 complies with ISO 9001:2015 Quality Management System and ISO 14001:2015 Environmental Management System as well as Environmental Directives RoHS and REACH, utilizing sustainable manufacturing processes and materials, such as FSC®-certified paper whenever possible.

#### Overview

IC:	Impinj M830
EPC/User Memory:	128 bit / - bit
TID Memory:	96 bit incl. 48 bit unique S/N
Frequency Band:	860 - 960 MHz
Protocol:	EPC Class 1 Gen 2 - ISO 18000-63

#### Application Areas

- Automotive
- Inventory Visibility
- Item Level Tagging
- Logistics
- Supply Chain Management



The mark of responsible forestry  
FSC® C166692



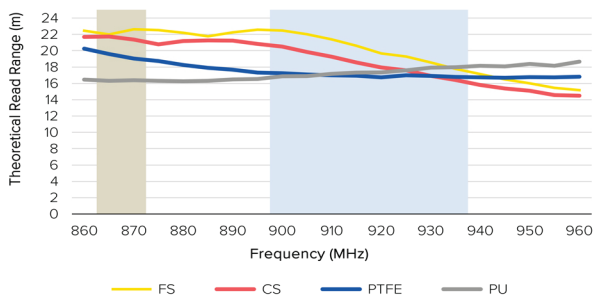
# EOS-500 M830

## T A G E O S

### Technical Overview

	Dry	Wet	Paper-face
Product Code	5000000100	5000000101	5000000102
Antenna Size	94 x 24 mm 3.70 x 0.94 in	94 x 24 mm 3.70 x 0.94 in	94 x 24 mm 3.70 x 0.94 in
Finish Size	-	97 x 27 mm 3.82 x 1.06 in	97 x 27 mm 3.82 x 1.06 in
Web Width	105.00 ± 1 mm 4.134 ± 0.04 in	105.00 ± 1 mm 4.134 ± 0.04 in	105.00 ± 1 mm 4.134 ± 0.04 in
Pitch	30.04 ± 0.2 mm 1.183 ± 0.01 in	30.04 ± 1 mm 1.183 ± 0.04 in	30.04 ± 1 mm 1.183 ± 0.04 in
ARC Approval	-	-	-
FSC® Certification	-	-	-
Antenna Material	Aluminium	Aluminium	Aluminium
Front Face	-	PET Clear	Paper TT
Inlay Substrate	PET Clear 50µm	PET Clear 50µm	PET Clear 50µm
Inlay Adhesive	-	permanent	permanent
Liner	-	Paper	Paper
Operating Temperature	-40°C / +85°C   -40°F / +185°F @20% to 90% RH	-40°C / +85°C   -40°F / +185°F @20% to 90% RH	-40°C / +85°C   -40°F / +185°F @20% to 90% RH
Shelf Life	2 years @ +25°C/40%RH	2 years @ +25°C/40%RH	2 years @ +25°C/40%RH
Final Inspection	100% tested	100% tested	100% tested

Read Range



**Graphs:** All the graphs are indicative; performance in real life applications may vary. The data has been determined based on calculations for transmitters with a normal output power level and respective IC silicon. **Storage & handling precautions:** Observe standard storage and handling practices to minimize Electro Static Discharge. Tagueos reserves the right to change its products and services at any time without notice. As our products are used in circumstances beyond our control, we cannot be held liable for any damages caused through their use. This is a general purpose product not designed or intended for any specific application.

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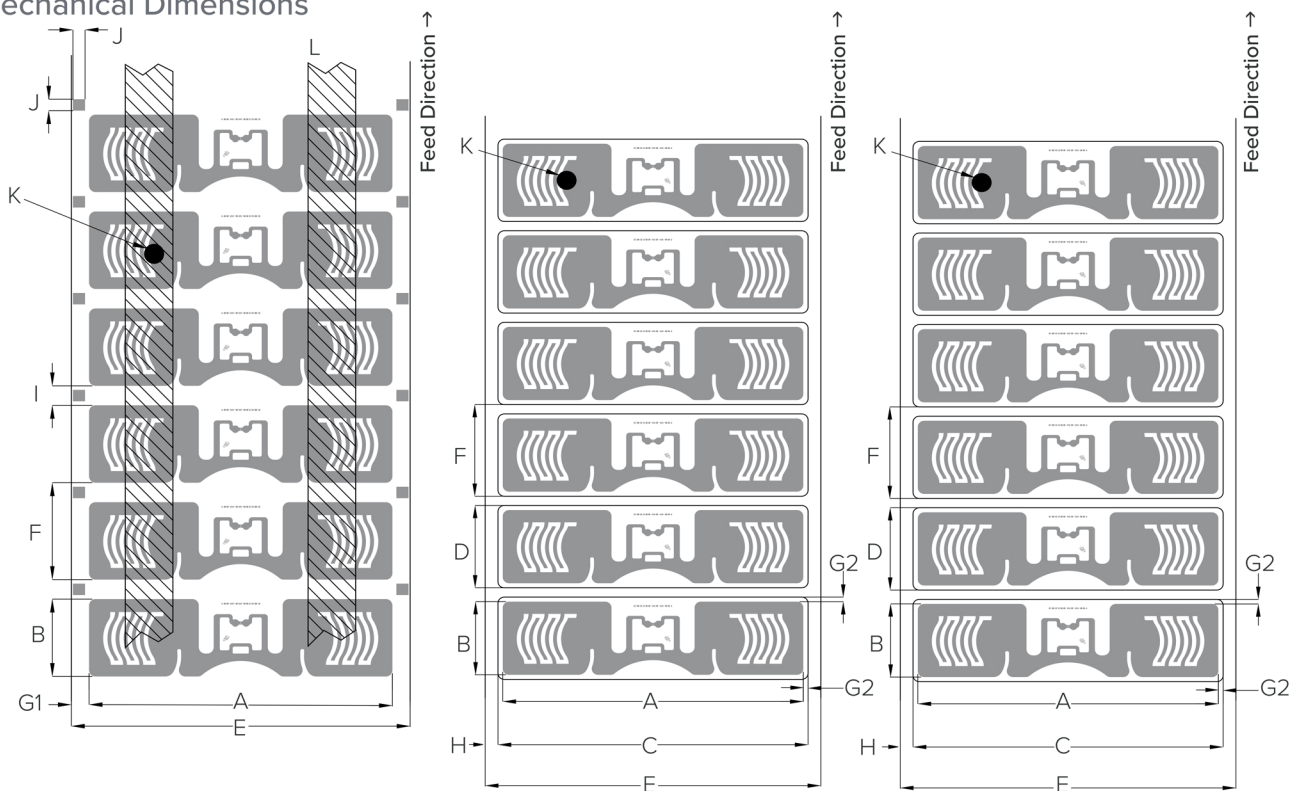


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T A G E O S

## Product Specifications

### Mechanical Dimensions



	Dry	Wet	Paper-face
Product Code	5000000100	5000000101	5000000102
Antenna Size	A x B 94 x 24 mm / 3.70 x 0.94 in	94 x 24 mm / 3.70 x 0.94 in	94 x 24 mm / 3.70 x 0.94 in
Finish Size	C x D - / -	97 x 27 mm / 3.82 x 1.06 in	97 x 27 mm / 3.82 x 1.06 in
Web Width	E 105.00 ± 1 mm / 4.134 ± 0.04 in	105.00 ± 1 mm / 4.134 ± 0.04 in	105.00 ± 1 mm / 4.134 ± 0.04 in
Pitch	F 30.04 ± 0.2 mm / 1.183 ± 0.01 in	30.04 ± 1 mm / 1.183 ± 0.04 in	30.04 ± 1 mm / 1.183 ± 0.04 in
Antenna to Web Edge	G1 5.5 ± 1 mm / 2.165 ± 0.04 in	-	-
Antenna to Die-cut	G2 -	1.5 ± 1 mm / 0.591 ± 0.04 in	1.5 ± 1 mm / 0.591 ± 0.04 in
Die-cut to Web Edge	H -	4.0 ± 1 mm / 1.575 ± 0.04 in	4.0 ± 1 mm / 1.575 ± 0.04 in
Antenna Gap	I 6.04 mm / 2.378 in	-	-
Converting Spot	J 3.75 x 3.54 mm / 1.476 x 1.394 in	-	-
Bad Mark	K Ø 6.0 mm / 0.236 in	Ø 6.0 mm / 0.236 in	Ø 6.0 mm / 0.236 in
Interleaves	L Yes	No	No



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# TAGEOS

## Packing Details

	Dry	Wet	Paper-face
Product Code	5000000100	5000000101	5000000102
Delivery Format	Roll (single row)	Roll (single row)	Roll (single row)
Core Inner Diameter	76 mm / 2.99 in	76 mm / 2.99 in	76 mm / 2.99 in
Roll Outer Diameter	338 mm / 13.31 in	326 mm / 12.83 in	200 mm / 7.87 in
Unwinding Direction	Inlay on outside of roll	Inlay on outside of roll	Inlay on outside of roll
Standard Roll Size	28 000	15 000	3 500
Min. Guar. Yield/Roll	98.5%	98.5%	98.5%
Box Dimensions	39.5 x 39.0 x 17.0 cm / 15.56 x 15.35 x 6.69 in	39.5 x 39.0 x 17.0 cm / 15.56 x 15.35 x 6.69 in	26.0 x 26.0 x 37.0 cm / 10.24 x 10.24 x 14.57 in
Roll/Box	1	1	3
Inlays/Box	28 000	15 000	10 500
Box Gross Weight	10.56 kg / 23.28 lbs	10.09 kg / 22.25 lbs	9.93 kg / 21.9 lbs
Pallet Dimensions	120 x 80 x 151 cm / 47.2 x 31.5 x 59.4 in	120 x 80 x 151 cm / 47.2 x 31.5 x 59.4 in	120 x 80 x 126 cm / 47.2 x 31.5 x 49.6 in
Boxes/Pallet	48	48	36
Inlays/Pallet	1 344 000	720 000	378 000
Pallet Gross Weight	532 kg / 1 173 lbs	509 kg / 1 122 lbs	382 kg / 842 lbs

