



EOS-450 U9

T A G E O S

Datasheet



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Versatile and High-Performance Solution for Retail and Beyond

The EOS-450 U9 global inlay combines moderate size with outstanding robust performance on a wide range of surfaces. Based on a design targeted for the challenging ARC Spec Z approval, this inlay is the product of choice for a wide range of applications such as retail, food and quick service restaurants, as well as logistics and general industrial segments. Hence, it is ideally suited for inventory visibility and item-level tagging.

EOS-450 U9 uses NXP's UCODE 9 IC which is well suited for inventory management applications and enables long read distance and fast inventory of dense RFID tag populations. The chip also features 96-bit EPC; kill password; EPC and kill password permalock; self-adjusting impedance; and memory integrity safeguards.

It complies with global frequency standards and is available in dry, wet, and paper-face delivery formats.

Tageos was one of the first companies to qualify for ARC Quality Certification for its manufacturing operations from Auburn University RFID Lab. EOS-450 U9 complies with ARC specification F, G, I, J, K, L, N, O, Q, R, Y, Y2, and Z as well as W1, W2, W3, W4, W5, and W6.

Like all Tageos' RFID products, EOS-450 U9 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 materials such as FSC® certified paper whenever possible.

Overview

IC:	NXP UCODE 9
EPC/User Memory:	96 bit / - bit
TID Memory:	96 bit incl. 48 bit unique S/N
Frequency Band:	860 - 960 MHz
Protocol:	EPC Class 1 Gen 2 - ISO 18000-6c

Application Areas

- Apparel
- Inventory Visibility
- Item Level Tagging
- Logistics
- Supply Chain Management
- Quick Service Restaurants



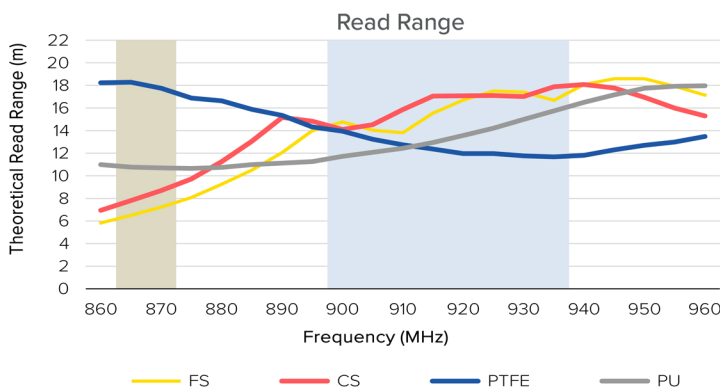


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Technical Overview

	Dry	Wet	Paper-face
Product Code	4500000008	4500000009	4500000010
Antenna Size	72 x 10 mm 2.83 x 0.39 in	72 x 10 mm 2.83 x 0.39 in	72 x 10 mm 2.83 x 0.39 in
Finish Size	-	75 x 13 mm 2.95 x 0.51 in	75 x 13 mm 2.95 x 0.51 in
Web Width	82.0 ± 1 mm 3.228 ± 0.04 in	82.0 ± 1 mm 3.228 ± 0.04 in	82.0 ± 1 mm 3.228 ± 0.04 in
Pitch	16.00 ± 0.2 mm 0.630 ± 0.01 in	16.00 ± 1 mm 0.630 ± 0.04 in	16.00 ± 1 mm 0.630 ± 0.04 in
Antenna Material	Aluminium	Aluminium	Aluminium
Front Face	-	PET clear	Paper TT
Inlay Substrate	PET clear	PET clear	PET clear
Inlay Adhesive	-	Permanent	Permanent
Liner	-	Paper	Paper
Operating Temperature	-40°C / +85°C -40°F / +185°F	-40°C / +85°C -40°F / +185°F	-40°C / +85°C -40°F / +185°F
Final Inspection	100% tested	100% tested	100% tested
ARC Approvals	F, G, I, J, K, L, N, O, Q, R, Y, Y2; Z, W1, W2, W3, W4, W5, W6	F, G, I, J, K, L, N, O, Q, R, Y, Y2; Z, W1, W2, W3, W4, W5, W6	F, G, I, J, K, L, N, O, Q, R, Y, Y2; Z, W1, W2, W3, W4, W5, W6



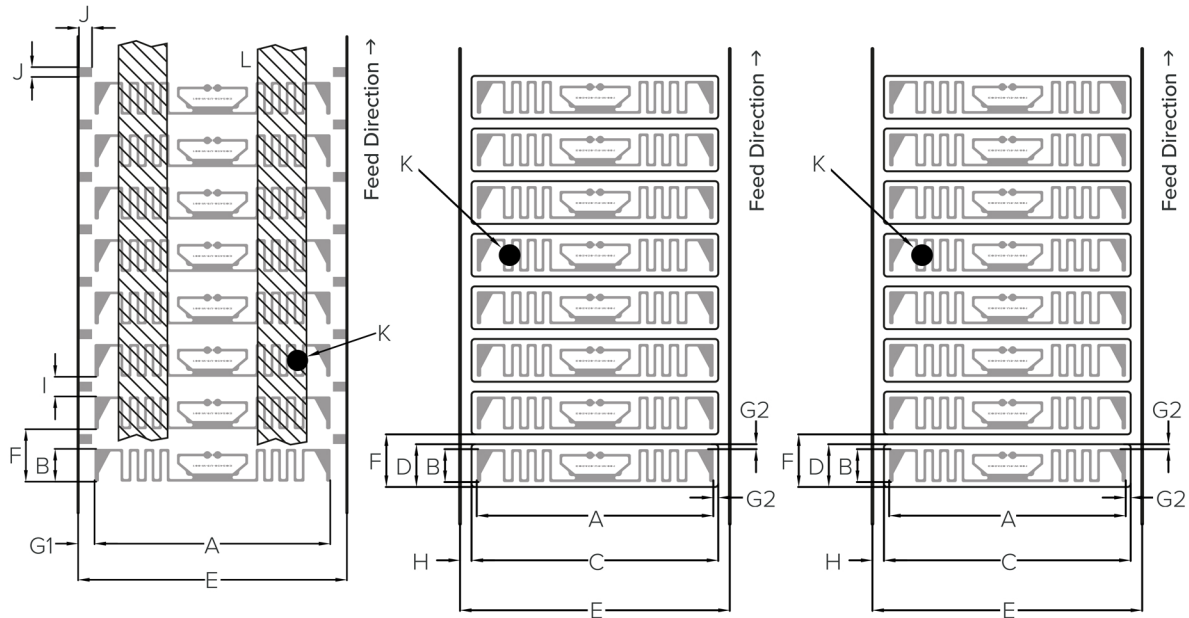
Graphs: All the graphs are indicative; performance in real life applications may vary. The data has been determined based on calculations for transmitters with a normal output power level and respective IC silicon. **Storage & handling precautions:** Observe standard storage and handling practices to minimize Electro Static Discharge. Tageos 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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Product Specifications

Mechanical Dimensions



	Dry	Wet	Paper-face
Product Code	4500000008	4500000009	4500000010
Antenna Size	A x B 72 x 10 mm / 2.83 x 0.39 in	72 x 10 mm / 2.83 x 0.39 in	72 x 10 mm / 2.83 x 0.39 in
Finish Size	C x D -	75 x 13 mm / 2.95 x 0.51 in	75 x 13 mm / 2.95 x 0.51 in
Web Width	E 82.0 ± 1 mm / 3.228 ± 0.04 in	82.0 ± 1 mm / 3.228 ± 0.04 in	82.0 ± 1 mm / 3.228 ± 0.04 in
Pitch	F 16.00 ± 0.2 mm / 0.630 ± 0.01 in	16.00 ± 1 mm / 0.630 ± 0.04 in	16.00 ± 1 mm / 0.630 ± 0.04 in
Antenna to Web Edge	G1 5.0 ± 1 mm / 0.197 ± 0.04 in	-	-
Antenna to Die-cut	G2 -	1.5 ± 1 mm / 0.059 ± 0.04 in	1.5 ± 1 mm / 0.059 ± 0.04 in
Die-cut to Web Edge	H -	4.0 ± 1 mm / 0.157 ± 0.04 in	4.0 ± 1 mm / 0.157 ± 0.04 in
Antenna Gap	I 6.00 mm / 0.236 in	-	-
Converting Spot	J 4.00 x 3.00 mm / 0.157 x 0.118 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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Packing Details

	Dry	Wet	Paper-face
Product Code	4500000008	4500000009	4500000010
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	291 mm / 11.46 in	351 mm / 13.82 in	193 mm / 7.60 in
Unwinding Direction	Inlay on outside of roll	Inlay on outside of roll	Inlay on outside of roll
Standard Roll Size	38 000	33 000	6 000
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	4
Inlays/Box	38 000	33 000	24 000
Box Gross Weight	5.46 kg / 12.04 lbs	8.24 kg / 18.17 lbs	8.22 kg / 18.12 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	1 824 000	1 584 000	864 000
Pallet Gross Weight	287 kg / 633 lbs	421 kg / 928 lbs	321 kg / 708 lbs



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