

EOS-241 U9

# T A G E O S

## Datasheet



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### Global-Compliant Versatile Solution for Retail and Logistics

The EOS-241 U9 inlay combines superior read performance with a compact antenna size ideally suited for item-level applications in retail and logistics. Optimized for use on diverse packaging materials, the inlay is ideal for inventory management in a wide range of non-food industries including retail apparel, supply chain, logistics, and pharmaceutical/healthcare.

EOS-241 U9 uses NXP's UCODE 9 IC, which offers superior global performance, 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.

The EOS-241 U9 inlay is available in dry, wet, and paper-face formats.

Tageos was one of the first companies to qualify for ARC Quality Certification for its manufacturing operations from Auburn University RFID Lab. EOS-241 U9 complies with ARC specifications F, G, O, Q, B1, W2, W5 and W6.

Like all Tageos' RFID products, EOS-241 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.

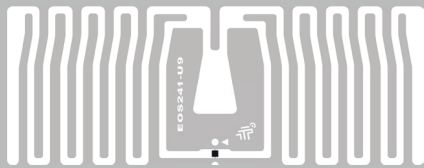
#### Overview

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
- Pharma & Healthcare
- Supply Chain Management





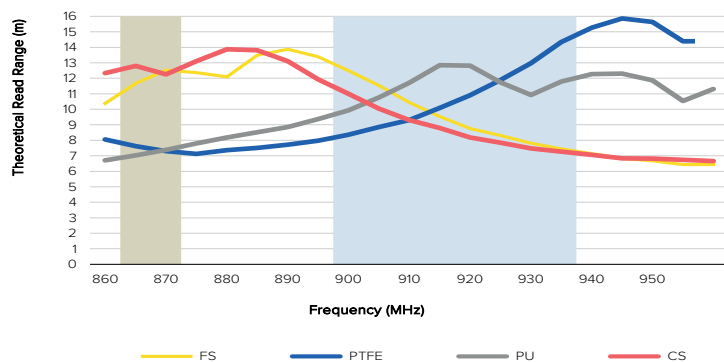
# EOS-241 U9

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## Technical Overview

	Dry Inlay	Wet Inlay	Paper-face Inlay
Product Code	2400000200	2400000154	2400000147
Antenna Size	42 x 16 mm 1.65 x 0.63 in	42 x 16 mm 1.65 x 0.63 in	42 x 16 mm 1.65 x 0.63 in
Finish Size	-	44 x 18 mm 1.73 x 0.71 in	44 x 18 mm 1.73 x 0.71 in
Web Width	48.0 ± 1 mm 1.890 ± 0.04 in	48.0 ± 1 mm 1.890 ± 0.04 in	48.0 ± 1 mm 1.890 ± 0.04 in
Pitch	22.23 ± 0.2 mm 0.875 ± 0.01 in	22.23 ± 1 mm 0.875 ± 0.04 in	22.23 ± 1 mm 0.875 ± 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, O, Q, B1, W2, W5, W6	F, G, O, Q, B1, W2, W5, W6	F, G, O, Q, B1, W2, W5, W6

Read Range

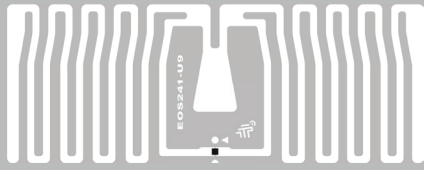


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**Graphs:** All the graphs are indicative; performance in real life applications may vary. The data has been determined based on calculations for transmitters with a normal output power level and respective IC silicon. **Storage & handling precautions:** 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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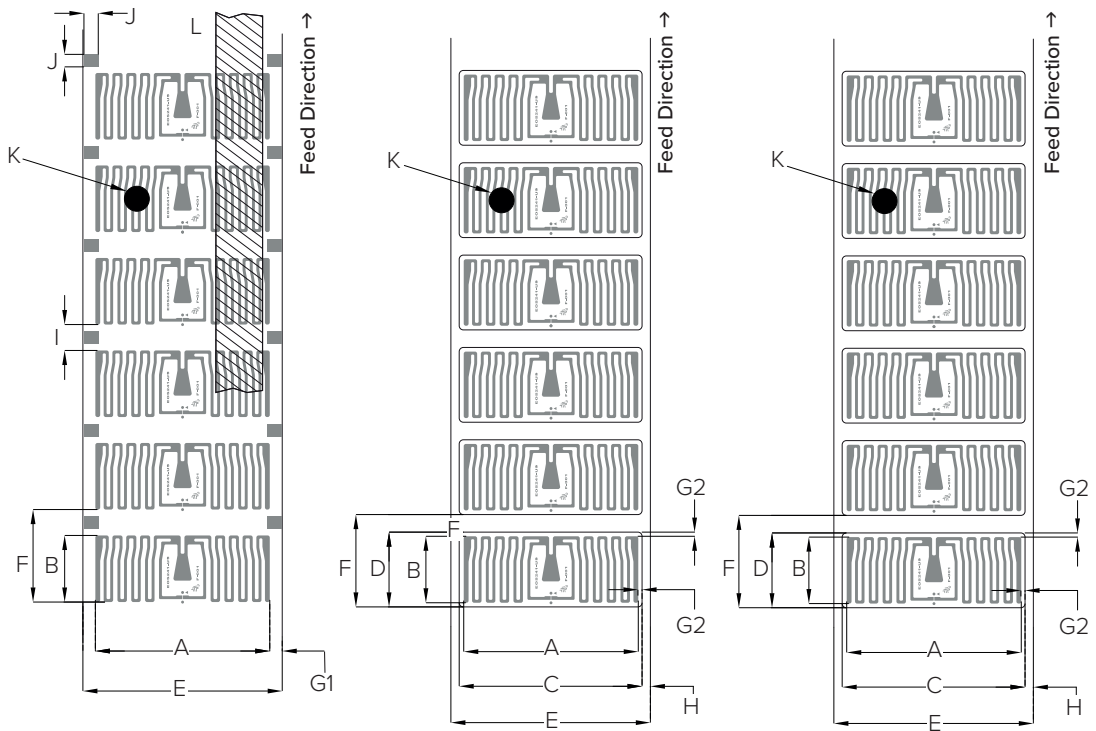


EOS-241 U9

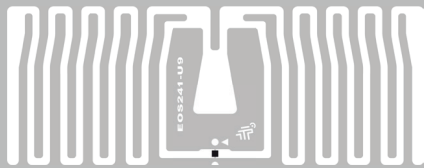
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## Product Specifications

### Mechanical Dimensions



	Dry Inlay	Wet Inlay	Paper-face Inlay
Product Code	2400000200	2400000154	2400000147
Antenna Size	A x B 42 x 16 mm / 1.65 x 0.63 in	42 x 16 mm / 1.65 x 0.63 in	42 x 16 mm / 1.65 x 0.63 in
Finish Size	C x D -	44 x 18 mm / 1.73 x 0.71 in	44 x 18 mm / 1.73 x 0.71 in
Web Width	E 48.0 ± 1 mm / 1.890 ± 0.04 in	48.0 ± 1 mm / 1.890 ± 0.04 in	48.0 ± 1 mm / 1.890 ± 0.04 in
Pitch	F 22.23 ± 0.2 mm / 0.875 ± 0.01 in	22.23 ± 1 mm / 0.875 ± 0.04 in	22.23 ± 1 mm / 0.875 ± 0.04 in
Antenna to Web Edge	G1 3.0 ± 1 mm / 0.118 ± 0.04 in	-	-
Antenna to Die-cut	G2 -	1.0 ± 1 mm / 0.039 ± 0.04 in	1.0 ± 1 mm / 0.039 ± 0.04 in
Die-cut to Web Edge	H -	2.0 ± 1 mm / 0.079 ± 0.04 in	2.0 ± 1 mm / 0.079 ± 0.04 in
Antenna Gap	I 6.23 mm / 0.245 in	-	-
Converting Spot	J 3.00 x 3.45 mm / 0.118 x 0.131 in	-	-
Bad Mark	K Ø 6 mm / 0.236 in	Ø 6 mm / 0.236 in	Ø 6 mm / 0.236 in
Interleaves	L yes	no	no



EOS-241 U9

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## Packing Details

	Dry Inlay	Wet Inlay	Paper-face Inlay
Product Code	2400000200	2400000154	2400000147
Delivery Format	Roll (single row)	Roll (single row)	Roll (single row)
Core Inner Diameter	76 mm / 3 in	76 mm / 3 in	76 mm / 3 in
Roll Outer Diameter	304 mm / 11.97 in	338 mm / 13.31 in	196 mm / 7.72 in
Unwinding Direction	Inlay on outside of roll	Inlay on outside of roll	Inlay on outside of roll
Standard Roll Size	30 000	22 000	4 500
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	2	2	6
Inlays/Box	60 000	44 000	27 000
Box Gross Weight	6.7 kg / 14.77 lbs	8.88 kg / 19.58 lbs	7.52kg / 16.58 lbs
Pallet Dimensions	120 x 80 x 151 47.2 x 31.5 x 59.4 in	120 x 80 x 151 47.2 x 31.5 x 59.4 in	120 x 80 x 126 47.2 x 31.5 x 49.6 in
Boxes/Pallet	48	48	36
Inlays/Pallet	2 880 000	2 112 000	972 000
Pallet Gross Weight	347 kg / 765 lbs	451 kg / 994 lbs	296 kg / 653 lbs

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