

Inlay Features

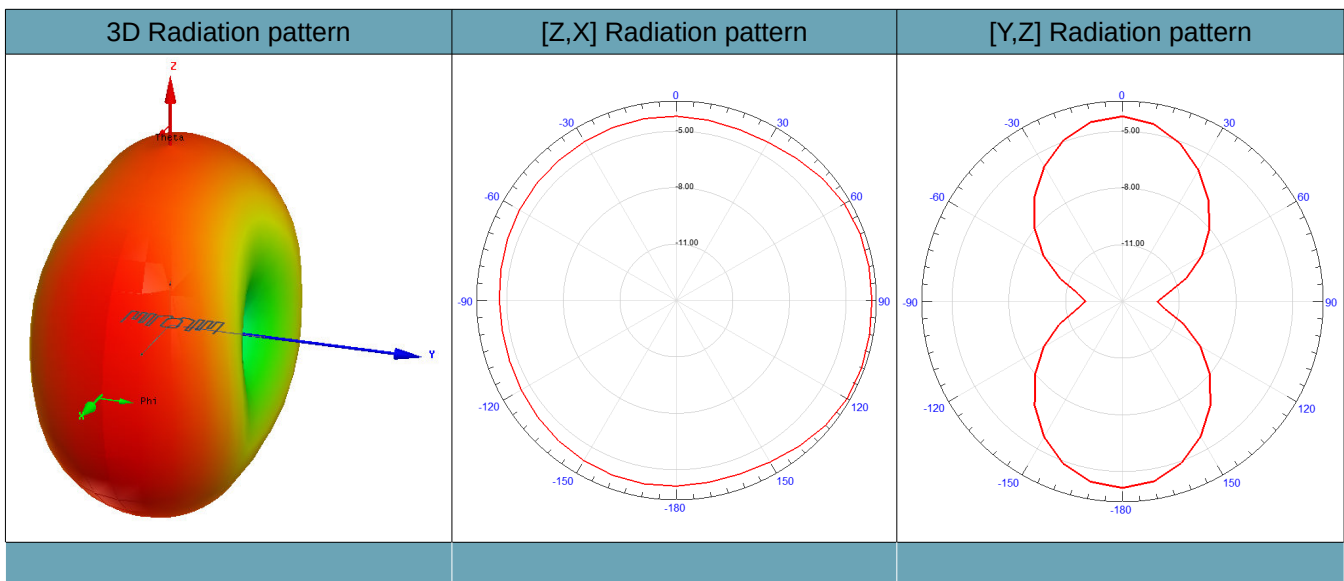
- Rain RFID compliant
- Long read range
- Supports NXP dies

Applications

- Apparel applications
- Logistics
- Item level tagging

Inlay Layout and Dimensions

	INSKYL7
Antenna width	54 mm \pm 0.5 mm (2.13 \pm 0.02 in)
Antenna length	18 mm \pm 0.5 mm (0.71 \pm 0.02 in)
Lengthwise pitch	31.75 mm \pm 0.5 mm (1.25 \pm 0.02 in)
Web width	62 mm \pm 0.5 mm (2.44 \pm 0.02 in)



Inlay Composition

Composition	Material	Thickness* [μm]
Top	Aluminium	$9 \pm 5\%$
Support	Polyester PET	$38 \pm 5\%$

* Overall thickness depends on the IC. For IC thickness please refer to the "Available ICs" table

Available ICs

	NXP UCode 7	EM Marin EM4124	EM Marin EM4126	
Product code	INSKYL7-U7	INSKYL7-EM4124	INSKYL7-EM4126	
Operating frequency	860 ÷ 960 MHz			
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C			
Thickness	120 $\mu\text{m} \pm 15\mu\text{m}$	152 $\mu\text{m} \pm 15\mu\text{m}$	152 $\mu\text{m} \pm 15\mu\text{m}$	
Operating temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C	
Unique serial number	Automatic TID based self serialization	32 bits in EPC & TID bank	32 bits serialized in EPC, non locked	
EPC code	128 bits	96 bits	208 bits	
User memory	-	-	-	
TID (locked)	96 bits	64 bits	32 bits	
Reserved memory	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)	-	
Write endurance	20 years	10 years	10 years	
Data retention	100 000 cycles	10 000 cycles	10 000 cycles	

General supply conditions

Reel dimensions	Internal diameter	76 mm
	External diameter	< 300 mm (custom sizes available upon request)
Reel quantity	Inlay per reel	10 000 \pm 10% (custom sizes available upon request)