



idChamp Inlay Model 9630 Inlay



Applications

- Apparel hang tags
- Corrugate cases
- Pallet placard labels
- Shipping labels
- Asset management
- File folder labels
- Application on plastics

Squiggle tag performance in a smaller tag

Approaches the well regarded Squiggle performance tag in a smaller form-factor

Smaller form-factor, still robust, proven, and reliable

Multiple frequency optimized sensitivity

Optimized for high performance in all world regions

A worldwide performance tag

Features:

- › EPC Gen 2 (v1.2.0) compliant
- › ISO/IEC 18000-6C compliant
- › Worldwide RFID UHF operation (840-960MHz)
- › Higgs™-3 IC with 800-bits of Nonvolatile Memory
 - 32-bit TID
 - 64-bit Unique TID
 - 96-bit EPC Memory, extensible to 480-bits
 - 512-bit User Memory
 - 32-bit Access password
 - 32-bit Kill password
- › Pre-programmed with a unique, unalterable 64-bit serial number (ideal for authentication)
- › User Memory can be Block Perma-Locked
- › User Memory can be Read Password protected in 64-bit blocks, prohibiting unintended Reads without an access password
- › Supports all Mandatory and Optional Gen 2 commands including item level commands
- › Custom commands for high speed programming
- › Available in high-yield, high-capacity dry/wet inlay rolls for high volume converting processes

Product Overview:

Powered by Serialio's break-through Higgs™ 3 UHF RFID IC and innovative antenna design, the idChamp-9630 delivers industry leading EPC Gen 2 performance and reliability in a narrower width than it's bigger brother and makes it ideal for apparel applications.

idChamp-9630 inlays are World Tag compliant, enabling consistent operation across the diverse frequencies of the Americas, Europe, Middle East, Asia, and Africa.

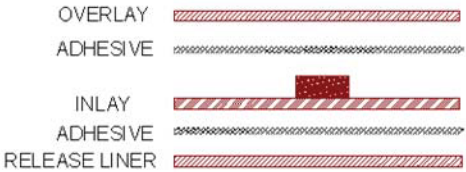
With its Higgs-3 core, the idChamp-9630 delivers excellent performance and a rich feature set expanding the standard 32-bit TID with an additional 64-bit Unique TID for authentication and serialization applications, an extensible EPC memory bank, 512-bits of user memory for distributed data applications, and password protected read and write support capabilities to prevent unauthorized viewing and modification of the tag's data.

idChamp-9630 Inlay Stackup

DRY INLAY THICKNESS, ±10%	
OVER ANTENNA	0.05 mm
OVER CHIP	0.25 mm

CLEAR WET INLAY THICKNESS, ±10%	
OVER ANTENNA	0.08 mm
OVER CHIP	0.28 mm

WHITE WET INLAY THICKNESS, ±10%	
OVER ANTENNA	0.16 mm
OVER CHIP	0.36 mm

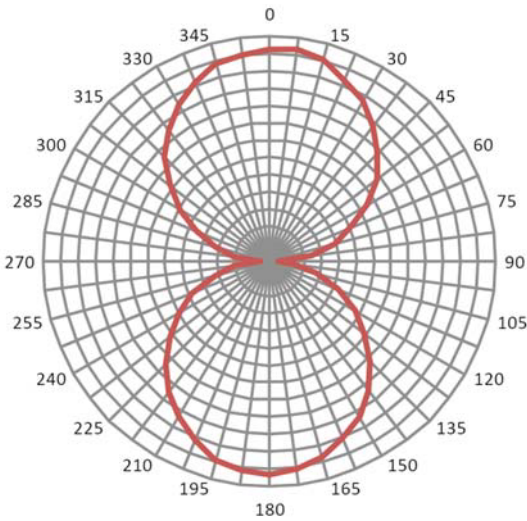


idChamp-9630-FR / -FSR
(Dry Unslit / Slit Inlay)

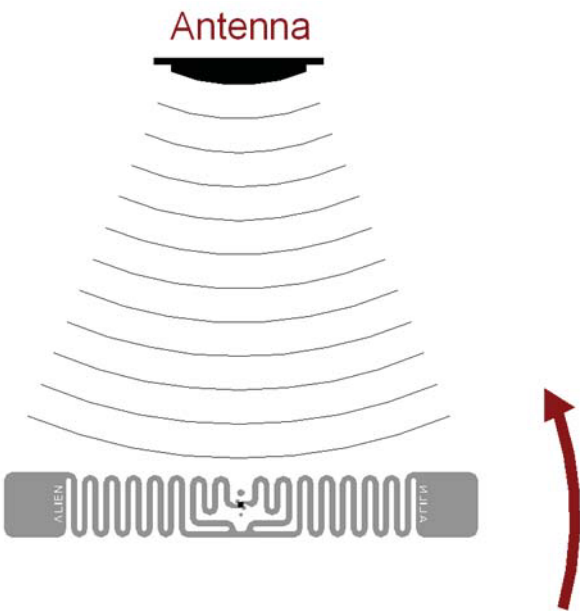
idChamp-9630-FWRC
(ClearWet Inlay)

idChamp-9630-FWRW
(WhiteWet Inlay)

idChamp-9630 Inlay Angular Sensitivity



Angular Sensitivity
(Relative Read Range vs. Orientation)



Angular Sensitivity
Inlay is rotated in the x, y, plane about the z axis
(tag shown at 0° with respect to face of antenna)

idChamp 9630 Specifications

Dry Inlay		Wet Inlay	
Antenna Width	2.756" [70mm]	Inlay Width	2.87" [73mm]
Antenna Length	0.374" [9.5mm]	Inlay Length	0.5" [12.7mm]
Web Width (-FR)	3.25" [82.5mm]	Web Width	3.0" [76.2mm]
Web Width (-FSR)	2.89" [73.5mm]	Web Pitch	0.625" [15.875mm]
Web Pitc	0.625" [15.875mm]	Core Width	3.0" [76.2mm]
Core Width (-FR)	3.25" [82.5mm]	Core ID	6" [152.4mm]*
Core Width (-FSR)	2.89" [73.5mm]	Core Material	Fiberboard
Core ID	6" [152.4mm]*	Inlays per Roll	20,000 Nominal
Core Material	Fiberboard	Maximum Roll OD	< 16" [406.4mm]
Interleaf Material	Paper	Roll Labeling Data	Roll #, Quantity
Interleaf Width	1.0" [25.4mm]	Clear (-FWRC)	PET base without Overlay
Inlays per Roll	20,000 Nominal	White (-FWRW)	TT Printable White Film Only
Maximum Roll OD	< 12" [304.8mm]	Overlay Adhesive (-FWRW)	General Purpose Permanent
Roll Labeling Data	Roll #, Quantity	Inlay Adhesive	General Purpose Permanent
Environmental		Adhesive Application Temperature	> +25°F [-4°C]
Shelf Life	2 years at +77°F [+25°C] @ 40%RH	Adhesive Service Temperature	-40°F to +200°F [-40°C to +93.3°C]
Recommended Storage	+77°F [+25°C] @ 40% RH	Release Liner	40# SCK
Storage Limits	-13°F to 122°F [-25°C to +50°C] 20% to 90% RH Non-condensing	RFID	
Operating Limits	-40°F to +158°F [-40°C to +70°C] 20% to 90% RH Non-condensing	Protocols Supported	ISO/IEC 18000-6C EPCglobal Class 1 Gen 2
Bend Diameter	> 1.97" [50mm]	Integrated Circuit	Higgs-3
Pressure	< 5N/mm ²	EPCglobal Certificate	950110126 000001084
Drop Resistance	Per ASTM D5276	Operating Frequency	840–960 MHz
Write Cycles	100,000 @ 25°C	EPC Size	96 - 480 Bits
RoHs	2002/95/EC, 2005/618/EC, 2011/65/EU Compliant	User Memory	512 Bits
REACH	1907/2006/EC Compliant (SVHC and ECHA)	TID	32 Bits
ESD Limit– HBM / CDM	5.0kV / 1.5kV	UniqueTID	64 Bits
		Access Password	32 Bits
		Kill Password	32 Bits

* Shipped with 6" to 3" plastic core adapter

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HANDLING PRECAUTIONS Observe standard handling practices to minimize ESD.

DISCLAIMER Application recommendations are guidelines only - actual results may vary and should be confirmed. This is a general purpose product not designed or intended for any specific application.