

The Ultimate Industrial RFID Product Guide

Your guide to finding the right RFID Tags, Labels, Inlays and Sensors
for your Industrial System, and more.

XERAFY

Digitize Your Business Smarter, Safer, Cleaner, Better

Xerafy enables digital transformation at Fortune 500 companies with benchmark-topping RFID tagging solutions and engineering services.

Connected Assets

At Xerafy, we believe in the Industrial Internet of Things.

Manufacturers and end-users develop smart connected assets using our RFID technology, allowing for more efficient business operations and new product capabilities.

Our mission: To push technological boundaries and solve the operational issues holding back Industry 4.0.

How We Got Started

Xerafy was founded by a team of experienced RFID engineers who got together to solve the problems faced by industrial customers.

Customers needed to manage small assets like hands tools, manufacturing molds, industrial equipment, medical devices. They wanted tags small enough to embed or attach to their assets but rugged enough to survive the extreme temperatures, humidity, and rough handling that are the norm in industrial environments.

Traditional barcode solutions available had already demonstrated too many limitations including line-of-sight, distance, automation, and durability.

The Xerafy engineering team came together to develop a breakthrough Radio Frequency Identification (RFID) design. Unlike others, it would take advantage of the metal in its surrounding, instead of being limited by it.

The company decided to name themselves Xerafy to symbolize the smallest EPC UHF RAIN RFID tag to verify and quantify assets.

The Company

Xerafy is headquartered in Singapore, and maintains sales and technical support offices in the US, UK and China. Xerafy's wholly owned manufacturing plant in China allows the company to guarantee quality as well as provide unique customization capabilities and cost advantages.

Contact Us

Find Your RFID Tags To Track Assets, Returnables, and Inventory: UHF, On Metal, Rugged, Small, High Temperatures, Embedded, Memory. Passive RFID tags that deliver performance, reliability, and consistency at the service of specialized asset identification and tracking systems:

RUGGED

Benchmark-leading performance and reliability

MICRO - high temp



PICO - small



XS - world smallest



ROSWELL - ultra rugged



TRAK

Durability for returnable assets and inventory

TRAK - inventory



POD TRAK - returnable



TEX TRAK - laundry



OUTDOOR - long range



XPLATE TRAK - stampable



SKIN

Smart labels for enhanced supply chains

Metal Skin® - durable labels



XSKIN - specialty labels



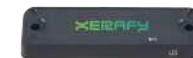
IOT

Advanced devices for real-time tracking and monitoring

XENSE - passive sensing



NFC - smart tracking



MICRO Series - high temp



	MICRO Industrial	MICRO Paint Shop	MICRO Autoclave	MICRO Medical	MICRO Power	MICRO Heat
Application	First Choice For Manufacturing	Best For The Paint Shop	Best For Complex Processes	Best For Medical Devices	Full Performance In Half The Size	The First Choice for High-Temp
Part number	X1130-US100-H9 X1130-EU100-H9	X1130-US130-H9 X1130-EU130-H9	X1130-US140-H9 X1130-EU140-H9	X0353-US100-U9 X0353-EU100-U9	X3130-US101-M750 X3130-EU101-M750	X1220-US050-H4 X1220-EU050-H4
Frequency	US, EU	US, EU	US, EU	US, EU	US, EU	US, EU
IC type	Alien Higgs 9	Alien Higgs 9	Alien Higgs 9	NXP UCODE 9	Impinj M750	Alien Higgs 4
EPC Memory: TID USER	96 bits 96 bits 688 bits	96 bits 96 bits 688 bits	96 bits 96 bits 688 bits	96 bits 96 bits -	96 bits 96 bits 32 bits	128 bits 96 bits 128 bits
Read range (fixed)	Up to 10 m / 32.81 ft	Up to 10 m / 32.81 ft	Up to 10 m / 32.81 ft	Up to 7 m / 22.97 ft	Up to 4 m / 13.12 ft	Up to 4 m / 13.12 ft
Affixes to	Metal surface	Metal surface	Metal surface	Metal / non metal surface	Metal surface	Metal surface
Dimensions: mm in	55 x 36.20 x 7.50 2.16 x 1.43 x 0.30	55 x 36.20 x 7.50 2.16 x 1.43 x 0.30	55 x 36.20 x 7.50 2.16 x 1.43 x 0.30	89.50 x 13 x 6.10 3.52x 0.51 x 0.24	32 x 10.80 x 6 1.25 x 0.43 x 0.24	42 x 15 x 2.10 1.65x 0.59 x 0.09
Material	Industry grade polymer 316L Stainless steel	Industry grade polymer 316L Stainless steel	Industry grade polymer 316L Stainless steel, Silicone	Industry grade polymer	Industrial grade polymer	High temperature polymer
Mounting	Pop rivets M3, Screws M3 Industrial adhesive (optional)	Pop rivets M3, Screws M3 Industrial adhesive (optional)	Pop rivets M3, Screws M3	Pop rivets M3, Screws M3 Cable and zip ties	Pop rivets M3, Screws M3 Cable ties Industrial adhesive (optional)	Screws M3, Cable ties Industrial adhesive
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C
Survival Temperature	-40°F to +482°F -40°C to +250°C	-40°F to +482°F -40°C to +250°C	-40°F to +302°F -40°C to +150°C	-40°F to +302°F -40°C to +150°C	-40°F to +302°F -40°C to +150°C	-40°F to +419°F -40°C to +215°C
IP rating	IP68	IP68	IP68, IP69K	IP68, IP69K	IP68	IP68



High Temp



User Memory



Autoclavable



Long Range

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PICO Series - small



	PICO On	PICO Off	PICO Mini 100/150/300			PICO In	PICO Plus	NANO Plus
Application	The reference for tool tracking	For small Plastic tools	Small and thin for tool tracking			Embeddable in metal	Packaged design for ruggedness	Ultimate range/size
Part number	X3110-US001-H9 X3110-EU001-H9	X3310-US001-H9 X3310-EU001-H9	X1035-USP00-U8 X1035-EUP00-U8	X1204-USP00-U8 X1204-EUP00-U8	X1307-USP00-U8 X1307-EUP00-U8	X3210-US000-H9 X3210-US000-H9	X3110-US101-H9 X3110-EU101-H9	X1120-US101-H9 X1120-EU101-H9
Frequency	US, EU	US, EU	US, EU			US, EU	US, EU	US, EU
IC type	Alien Higgs 9	Alien Higgs 9	NXP UCODE 8			Alien Higgs 9	Alien Higgs 9	Alien Higgs 9
EPC Memory: TID USER	96 bits 96 bits 688 bits	96 bits 96 bits 688 bits	128 bits 96 bits -			96 bits 96 bits 688 bits	96 bits 96 bits 688 bits	96 bits 96 bits 688 bits
Read range (fixed)	Up to 3 m / 9.84 ft	Up to 2 m / 6.52 ft	Up to 0.50 m / 1.64 ft	Up to 3 m / 9.84 ft	Up to 4 m / 13.12 ft	Up to 2 m / 6.52 ft embedded	Up to 3 m / 9.84 ft	Up to 6 m / 19.69 ft
Affixes to	Metal surface	Non metal surface	Metal surface			Metal surface	Metal surface	Metal surface
Dimensions: mm in	12.80 x 7.08 x 3.08 0.50 x 0.28 x 0.12	12.80 x 7.08 x 3.08 0.50 x 0.28 x 0.12	10 x 3.50 x 1 0.39 x 0.14 x 0.04	12 x 4 x 1.50 0.47 x 0.16 x 0.06	13 x 7 x 3 0.51 x 0.28 x 0.12	12.80 x 7.08 x 3.08 0.50 x 0.28 x 0.12	17.70 x 10.90 x 5 0.70 x 0.43 x 0.20	31.70 x 12.80 x 4.97 1.25 x 0.51 x 0.20
Material	Ceramic	Ceramic	FR4 (PCB)			Ceramic	Industrial grade polymer	Industrial grade polymer
Mounting	Industrial adhesive	Industrial adhesive	Epoxy			Epoxy, embedded	Industrial adhesive	Industrial adhesive
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C			-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C
Survival Temperature	-40°F to +302°F -40°C to +150°C	-40°F to +302°F -40°C to +150°C	-40°F to +185°F -40°C to +85°C			-40°F to +302°F -40°C to +150°C	-40°F to +302°F -40°C to +150°C	-40°F to +302°F -40°C to +150°C
IP rating	IP68	IP68	IP68			IP68	IP68	IP68

High Temp User Memory Embeddable

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XS Series - world smallest



	XS Dash	XS Dot	XS Wedge	
Application	Market Leader For Critical Tools	World's Smallest Rugged Tag	Embeddable For Critical Tools	
Part number	X4101-US000-H9 X4101-EU000-H9	X4102-US000-H9 X4102-EU000-H9	X4202-US100-H9 X4202-EU100-H9	
Frequency	US, EU	US, EU	US, EU	
IC type	Alien Higgs 9	Alien Higgs 9	Alien Higgs 9	
EPC Memory: TID USER	96 bits 96 bits 688 bits	96 bits 96 bits 688 bits	96 bits 96 bits 688 bits	
Read range (fixed)	Up to 2 m / 6.56 ft	Up to 1.50 m / 4.92 ft	Up to 1 m / 3.28 ft	
Affixes to	Metal surface	Metal surface	Metal surface	
Dimensions: mm in	12.30 x 3 x 2.20 0.48 x 0.12 x 0.09	ø 6 x 2.50 ø 0.24 x 0.10	ø 10.30 x 4.60 ø 0.41 x 0.18	
Material	Ceramic	Ceramic	Industry grade polymer	
Mounting	Epoxy	Epoxy	Press fit, embedded	
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	
Survival Temperature	-40°F to +302°F -40°C to +150°C	-40°F to +302°F -40°C to +150°C	-40°F to +482°F -40°C to +250°C	
IP rating	IP68	IP68	IP68	

High Temp User Memory Embeddable

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ROSWELL Series - ultra rugged



	ROSWELL Autoclavable	ROSWELL	XPLOER Screw	XPLOER Downhole	XPLOER Surface
Application	World's Most Rugged Tag	Best For Hazardous Environments	Screw-In RFID Tag for Tubulars	Ultra-Rugged Embeddable RFID	The Toughest Embeddable RFID Tag
Part number	X1114-US143-H9 X1114-EU143-H9	X1114-US101-H3 X1114-EU101-H3	X1116-US120-U9 X1116-EU120-U9	X1115-US101-H3 X1115-EU101-H3	X1115-US111-H3 X1115-EU111-H3
Frequency	US, EU	US, EU	US, EU	US, EU	US, EU
IC type	Alien Higgs 9	Alien Higgs 3	NXP UCODE 9	Alien Higgs 3	Alien Higgs 3
EPC Memory: TID USER	96 bits 96 bits 688 bits	96/480 bits 96 bits 512 bits	96 bits 96 bits -	96/480 bits 96 bits 512 bits	96/480 bits 96 bits 512 bits
Read range (fixed)	Up to 5 m / 16.40 ft	Up to 5 m / 16.40 ft	Up to 5 m / 16.40 ft embedded	Up to 1.50 m / 4.92 ft	Up to 1.50 m / 4.92 ft
Affixes to	Metal surface	Metal surface	Metal surface	Metal surface	Metal surface
Dimensions: mm in	48 x 28 x 13.50 1.89 x 1.10 x 0.53	48 x 28 x 13.50 1.89 x 1.10 x 0.53	ø 24 x 10.01 0.94 x 0.39	ø 28.30 x 8.50 ø 1.11 x 0.33	ø 28.30 x 8.50 ø 1.11 x 0.33
Material	Stainless steel, High-performance engineered polymer	Aluminum, High-performance engineered polymer	Industry grade polymer	Stainless steel 316L, High-performance engineered polymer	Stainless steel 316L, High-performance engineered polymer
Mounting	Welding, Rivets M4, Screws M4, Cable ties	Welding, Rivets M4, Screws M4, Cable ties	Screw in, Embedded	Snap in, Embedded	Snap in, Embedded
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C
Survival Temperature	-40°F to +482°F -40°C to +250°C	-40°F to +482°F -40°C to +250°C	-40°F to +482°F -40°C to +250°C	-40°F to +482°F -40°C to +250°C	-40°F to +482°F -40°C to +250°C
IP rating	IP68, IP69K	IP68	IP68, IP69K	IP68, IP69K	IP68, IP69K

High Temp
 User Memory
 Autoclavable
 Embeddable

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ROSWELL Series - ultra rugged



	PIPETRACKER2	TACKTAG2	DURADROP	DURAZIP	DATABAND2
Application	Ultra-Rugged Metal Tag for Tubulars	Weldable Ultra-Rugged Metal Tag for Equipment	Ultra-Rugged Hang Tag for Rigging & Lifting	Durable Cable Tie Tag for Rigging & Lifting	Dual UHF+NFC Durable Tag For Tubulars
Part number	X4624-US100-U9 X4624-EU100-U9	X2415-US100-U9 X2415-EU100-U9	X3528-US100-U9 X3528-EU100-U9	X3530-US100-H9 X3530-EU100-H9	X3819-US100-U8 X3819-EU100-U8
Frequency	US, EU	US, EU	US, EU	US, EU	US, EU, HF
IC type	NXP UCODE 9	NXP UCODE 9	NXP UCODE 9	Alien Higgs 9	NXP UCODE 8 ICODE SLIX
EPC Memory: TID USER	96 bits 96 bits -	96 bits 96 bits -	96 bits 96 bits -	96 bits 96 bits 688 bits	128 bits 96 bits (UHF) 64 bits UID, 896 bits user memory (HF)
Read range (fixed)	Up to 1.83 m / 6 ft	Up to 2.13 m / 7 ft	Up to 0.91 m / 3 ft	Up to 1.52 m / 5 ft	Up to 3 m / 9.84 ft
Affixes to	Metal surface	Metal surface	Metal surface	Metal surface	Metal surface
Dimensions: mm in	46.23 x 24.89 x 8.38 1.82 x 0.98 x 0.33	24.38 x 14.99 x 5.84 0.96 x 0.59 x 0.23	35 x 28 x 4.65 1.38 x 1.10 x 0.18	35.56 x 30.48 x 17.78 1.40 x 1.20 x 0.70	38.10 x 19.05 x 6.35 1.50 x 0.75 x 0.25
Material	304 stainless steel, PCB	Stainless steel, PCB	Stainless steel, PCB	PC/PBT	PC/PBT alloy, glue
Mounting	Band, Cinch	Welding	Hook, Tie, Rope	Hang	Band
Operational Temperature	-40°F to +302°F -40°C to +150°C	-40°F to +302°F -40°C to +150°C	-40°F to +257°F -40°C to +125°C	-40°F to +257°F -40°C to +125°C	-40°F to +185°F -40°C to +85°C
Survival Temperature	-40°F to +302°F -40°C to +150°C	-40°F to +302°F -40°C to +150°C	-40°F to +257°F -40°C to +125°C	-40°F to +257°F -40°C to +125°C	-40°F to +257°F -40°C to +125°C
IP rating	IP68	IP68	IP68	IP68	IP68



High Temp



User Memory

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TRAK Series - inventory



	Circular TRAK	Versa TRAK	Data TRAK II	Slim TRAK	Global TRAK
Application	The Best Choice for Circular Economy	First Choice For Versatile Options	The Universal Choice For Visibility	Best Choice For A Slimmer Tag	Best Choice For Global Visibility
Part number	X0553-US170-R6P X0553-EU170-R6P	X0350-GL011-M750	X0330-GL021-M4QT	X0330-GL001-H9	X0340-GL021-M4QT
Frequency	US, EU	Global	Global	Global	Global
IC type	Impinj Monza R6-P	Impinj M750	Impinj M4QT	Alien Higgs 9	Impinj M4QT
EPC Memory: TID USER	128/96 bits 96 bits 32/64 bits	96 bits 96 bits 32 bits	128 bits 96 bits 512 bits	96 bits 96 bits 688 bits	128 bits 96 bits 512 bits
Read range (fixed)	Up to 2.30 m / 7.55 ft	Up to 9 m / 29.53 ft	Up to 2.50 m / 8.20 ft	Up to 2 m / 6.56 ft	Up to 2.50 m / 8.20 ft
Affixes to	Metal / non metal surface	Metal / non metal surface	Metal / non metal surface	Metal / non metal surface	Metal / non metal surface
Dimensions: mm in	ø 25x 3.50 ø 0.98 x 0.14	50.30 x 17 x 5.30 1.98 x 0.67 x 0.21	38 x 13 x 4 1.50 x 0.51 x 0.16	56.50 x 5.95 x 1.30 2.22 x 0.23 x 0.05	38 x 13 x 4 1.50 x 0.51 x 0.16
Material	Food grade silicone	Industry grade polymer	Industry grade polymer	Industry grade polymer	Industry grade polymer
Mounting	Food grade silicone glue	Industrial adhesive Cable ties (optional)	Cable ties Industrial adhesive	Cable ties Industrial adhesive	Industrial adhesive
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C
Survival Temperature	-40°F to +212°F -40°C to +100°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +302°F -40°C to +150°C	-40°F to +185°F -40°C to +85°C
IP rating	IP68	IP68	IP68	IP68	IP68



High Temp



User Memory



Global Frequency

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POD TRAK Series - returnable



	POD TRAK 115	POD TRAK 85	POD TRAK 60	
Application	Slimmest Identification	Most Flexible Identification	Smallest For All Identification	
Part number	X1113-GLC01-U9	X8522-GLC00-U9	X6020-GLC01-U9	
Frequency	Global	Global	Global	
IC type	NXP UCODE 9	NXP UCODE 9	NXP UCODE 9	
EPC Memory: TID USER	96 bits 96 bits -	96 bits 96 bits -	96 bits 96 bits -	
Read range (fixed)	Up to 17 m / 55.77 ft	Up to 10 m / 32.81 ft	Up to 6 m / 19.69 ft	
Affixes to	Non metal surface	Non metal surface	Non metal surface	
Dimensions: mm in	115 x 13 x 0.88 4.53 x 0.51 x 0.03	85 x 22 x 0.88 3.35 x 0.87 x 0.03	60 x 20 x 0.88 2.36 x 0.79 x 0.03	
Material	PVC	PVC	PVC	
Mounting	Rivets, Screws, Zip ties Industrial adhesive	Rivets, Screws, Zip ties Industrial adhesive	Rivets, Screws, Zip ties Industrial adhesive	
Operational Temperature	-40°F to +131°F (-40°C to +55°C)	-40°F to +131°F (-40°C to +55°C)	-40°F to +131°F (-40°C to +55°C)	
Survival Temperature	-40°F to +158°F (-40°C to +70°C)	-40°F to +158°F (-40°C to +70°C)	-40°F to +158°F (-40°C to +70°C)	
IP rating	IP68	IP68	IP68	

Global Frequency Long Range

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OUTDOOR Series - long range



	Xylinder OUTDOOR	Container OUTDOOR	Cargo OUTDOOR	RTI OUTDOOR	Flex OUTDOOR
Application	Bendable Tagging for Cylinders	Leader For Long-Range Visibility	Multi-Surface Visibility	Best Choice For RTI Visibility	Flexible Off-Metal Visibility
Part number	X0362-USP70-U9 X0362-EUP70-U9	X0361-US100-M830 X0361-EU100-M830	X03A3-US100-M750 X03A3-EU100-M750	X0352-US100-U9xe X0352-EU100-U9xe	X0370-GL100-H3
Frequency	US, EU	US, EU	US, EU	US, EU	Global
IC type	NXP UCODE 9	Impinj M830	Impinj M750	NXP UCODE 9xe	Alien Higgs 3
EPC Memory: TID USER	96 bits 96 bits -	128 bits 96 bits -	96 bits 96 bits 32 bits	128 bits 96 bits -	96/480 bits 96 bits 512 bits
Read range (fixed)	Up to 7 m / 22.97 ft	Up to 40 m / 131.23 ft	Up to 12 m / 39.37 ft	Up to 10 m / 32.81 ft	Up to 7.50 m / 24.61 ft
Affixes to	Metal / non metal surface	Metal / non metal surface	Metal / non metal surface	Metal / non metal surface	Non metal surface
Dimensions: mm in	60 x 41x 8 2.36 x 1.61 x 0.31	139 x 42.20 x 12 5.46 x 1.65 x 0.47	100 x 26 x 8.90 3.94 x 1.02 x 0.30	73.30 x 22.80 x 8.65 2.88 x 0.90 x 0.34	90 x 18 x 4 3.54 x 0.71 x 0.16
Material	Engineered silicone	Industry grade polymer	Industry grade polymer Stainless steel	Anti-UV Industry grade polymer	High-Elasticity Polymer
Mounting	Glue, Industrial adhesive	Rivets M6, Screws M6, Zip ties, Cable ties, Industrial adhesive (optional)	Rivets M3, Screws M3, Zip ties, Cable ties, Industrial adhesive (optional)	Rivets M3, Screws M3, Zip ties, Cable ties, Industrial adhesive (optional)	Zip ties, Cable ties, Industrial adhesive (optional)
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C
Survival Temperature	-40°F to +302°F -40°C to +150°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +212°F -40°C to +100°C
IP rating	IP68, IP69K	IP68	IP68	IP68	IP68

High Temp
 User Memory
 Global Frequency
 Long Range

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— TEX TRAK Series - laundry



	TEX 70x22 Roll	TEX 70x15	TEX 50x12	TEX 55x12 Silicone	
Application	Print-Ready Roll Format	Medium-Size Fabric Tag	Compact Fabric Tag	Flexible Silicone Tag	
Part number	X7022-GL011-U9xe (Sew) X7022-GL010-U9xe (Heat-seal)	X7015-GL010-M830 (Sew) X7015-GL011-M830 (Heat-seal) X7015-GL010-U9xe (Sew) X7015-GL011-U9xe (Heat-seal)	X5012-GL010-M830 (Sew) X5012-GL011-M830 (Heat-seal) X5012-GL010-U9xe (Sew) X5012-GL011-U9xe (Heat-seal)	X5512-GL070-U9	
Frequency	Global	Global	Global	Global	
IC type	NXP UCODE 9xe	Impinj M830 NXP UCODE 9xe	Impinj M830 NXP UCODE 9xe	NXP UCODE 9	
EPC Memory: TID USER	128 bits 96 bits -	128 bits 96 bits -	128 bits 96 bits -	96 bits 96 bits -	
Read range (fixed)	Up to 6 m / 19.69 ft	Up to 10 m / 32.81 ft	Up to 6 m / 19.69 ft	Up to 6 m / 19.69 ft	
Affixes to	Textile	Textile	Textile	Textile	
Dimensions: mm in	70 x 22 x 0.65 2.76 x 0.87 x 0.03	70 x 15 x 0.70 2.76 x 0.59 x 0.03	50 x 12 x 0.66 1.97 x 0.47 x 0.03	55 x 12 x 2.50 2.17 x 0.47 x 0.10	
Material	Textile	Textile	Textile	Silicone	
Mounting	Sew or heat-seal based on specific requirements, with different product P/N selections	Sew or heat-seal based on specific requirements, with different product P/N selections	Sew or heat-seal based on specific requirements, with different product P/N selections	Sew	
Operational Temperature	-4°F to +185°F -20°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	
Survival Temperature	-	-40°F to +230°F -40°C to +110°C	-40°F to +230°F -40°C to +110°C	-40°F to +185°F -40°C to +85°C	
IP rating	IP68	IP68	IP68	IP68	

Global Frequency Long Range

The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global).

This guide serves as a reference for comparison purposes exclusively. For more comprehensive information, please refer to the product specifications provided in the datasheets.

XPLATE Series - stampable



	XPLATE	XPLATE	
Application	Aluminum Nameplate 	Stainless Steel Nameplate 	
Part number	X8001-US100-M750 (aluminum) X8001-EU100-M750 (aluminum)	X8002-US100-M750 (stainless steel) X8002-EU100-M750 (stainless steel)	
Frequency	US, EU	US, EU	
IC type	Impinj M750	Impinj M750	
EPC Memory: TID USER	96 bits 96 bits 32 bits	96 bits 96 bits 32 bits	
Read range (fixed)	Up to 10 m / 32.81 ft 	Up to 10 m / 32.81 ft 	
Affixes to	Metal / non metal surface	Metal / non metal surface	
Dimensions: mm in	85 x 59.30 x 15.40 3.35 x 2.31 x 0.61	85 x 59.30 x 15.40 3.35 x 2.31 x 0.61	
Material	Industry polymer Aluminum / stainless steel plate	Industry polymer Aluminum / stainless steel plate	
Mounting	Pop rivets (metal plate M3), Screw M3 Welding, Adhesives (optional)	Pop rivets (metal plate M3), Screw M3 Welding, Adhesives (optional)	
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	
Survival Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	
IP rating	IP68	IP68	

 Long Range

The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global). HF 13.56 MHz.

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Metal Skin® Series - durable labels



	Mercury	Mercury R6P	Mercury 86 Max	Mercury 95 Max	Delta	Delta U8
Application	Largest Printable Labels	Largest Printable Labels	Max Range with Impinj	Max Range with NXP	The Thinnest On-Metal Labels	Flexible On-metal Labels
Part number	X51A0-US100-U9 X51A0-EU100-U9	X1040-US011-R6P	X8654-US011-R6P	X9522-US011-U8 X9522-EU011-U8	X7030-US011-M830 X7030-EU011-M830	X8040-US011-U8 X8040-EU011-U8
Frequency	US, EU	US	US	US, EU	US, EU	US, EU
IC type	NXP UCODE 9	Impinj Monza R6-P	Impinj Monza R6-P	NXP UCODE 8	Impinj M830	NXP UCODE 8
EPC Memory: TID USER	96 bits 96 bits -	128/96 bits 96 bits 32/64 bits	128/96 bits 96 bits 32/64 bits	128 bits 96 bits -	128 bits 96 bits -	128 bits 96 bits -
Read range (fixed)	Up to 8 m / 26.25 ft	Up to 8 m / 26.25 ft	Up to 19 m / 62.34 ft	Up to 16 m / 52.49 ft	Up to 4.50 m / 14.76 ft	Up to 11 m / 36.09 ft
Affixes to	Metal / non metal surface	Metal surface	Metal / non metal surface	Metal surface	Metal / non metal surface	Metal / non metal surface
Dimensions: mm in	101.60 x 38 x 1 4 x 1.50 x 0.04	100 x 40 x 1 3.94 x 1.57 x 0.04	86 x 54 x 1.25 3.39 x 2.13 x 0.05	95 x 22 x 1.25 3.74 x 0.87 x 0.04	70 x 30 x 0.40 2.76 x 1.18 x 0.02	80 x 40 x 1 3.15 x 1.57 x 0.04
Material	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock
Mounting	Industrial adhesive	Industrial adhesive	Industrial adhesive	Industrial adhesive	Industrial adhesive	Industrial adhesive
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F (-40°C to +85°C)
Survival Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F (-40°C to +85°C)
IP rating	IP68	IP68	IP68	IP68	IP68	IP68



Long Range

The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global).

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Metal Skin® Series - durable labels



	Platinum	Platinum R6P	Platinum 55 Universal	Platinum 60 Max	Platinum 60 Tamper	Platinum 64 Slim
Application	Universal Labeling Solutions	Universal Labeling Solutions	For IT Assets	Max Range	For Tamper Proof	For Slim Labeling
Part number	X50A3-US011-U9 X50A3-EU011-U9	X6025-US011-R6P X6025-EU011-R6P	X5515-US011-U8	X6025-US011-U8	X6025-UST11-U9 X6025-EUT11-U9	X6406-US011-U8 X6406-EU011-U8
Frequency	US, EU	US, EU	US	US	US, EU	US, EU
IC type	NXP UCODE 9	Impinj Monza R6-P	NXP UCODE 8	NXP UCODE 8	NXP UCODE 9	NXP UCODE 8
EPC Memory: TID USER	96 bits 96 bits -	28/96 bits 96 bits 32/64 bits	128/96 bits 96 bits 32/64 bits	128 bits 96 bits -	128 bits 96 bits -	128 bits 96 bits -
Read range	Up to 5 m / 16.40 ft	Up to 5 m / 16.40 ft	Up to 7.40 m / 24.28 ft	Up to 9.50 m / 31.17 ft	Up to 5.50 m / 18.04 ft	Up to 4.50 m / 14.76 ft
Affixes to	Metal / non metal surface	Metal / non metal surface	Metal / non metal surface	Metal / non metal surface	Metal surface	Metal / non metal surface
Dimensions: mm in	58.50 x 19 x 1 2.30 x 0.75 x 0.04	60 x 25 x 1 2.36 x 0.98 x 0.04	55 x 15 x 1.25 2.17 x 0.59 x 0.05	60 x 25 x 1 2.36 x 0.98 x 0.04	60 x 25 x 1.25 2.36 x 0.98 x 0.05	64 x 6 x 1 2.52 x 0.24 x 0.04
Material	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock
Mounting	Industrial adhesive	Industrial adhesive	Industrial adhesive	Industrial adhesive	Industrial adhesive	Industrial adhesive
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C
Survival Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +248°F -40°C to +120°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C
IP rating	IP68	IP68	IP68	IP68	IP68	IP68

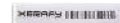
The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global).

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Metal Skin® Series - durable labels



IMPINJ GEN2X



	Titanium	Titanium M830	Titanium 48 Liquid	Titanium 30 Smallest	Titanium 25 Lasso	Titanium 25 HF
Application	Smallest RFID Stickers	Smallest Supports Gen2X	For Liquids	Market Smallest	For Hard-To-Tag Items	For HF Tracking
Part number	X5220-US100-U9 X5220-EU100-U9	X5220-US100-M830 X5220-EU100-M830	X4804-EU011-U8	X3006-US011-U9xe X3006-EU011-U9xe	X6813-GL011-U9	X2525-HF011-FM1108
Frequency	US, EU	US, EU	EU	US, EU	Global	HF
IC type	NXP UCODE 9	Impinj M830	NXP UCODE 8	NXP UCODE 9xe	NXP UCODE 9	FM1108
EPC Memory: TID USER	96 bits 96 bits -	128 bits 96 bits -	128 bits 96 bits -	128 bits 96 bits -	96 bits 96 bits -	64 bits
Read range (fixed)	Up to 2.50 m / 8.20 ft	Up to 3.50 m / 11.48 ft	Up to 5 m / 16.40 ft on liquid	Up to 1.80 m / 5.91 ft	Up to 8 m / 26.25 ft	Up to 0.05 m / 0.16 ft
Affixes to	Metal / non metal surface	Metal / non metal surface	Metal / non metal surface	Metal / non metal surface	Metal surface	Metal surface
Dimensions: mm in	45 x 5.60 x 1 1.77 x 0.22 x 0.04	45 x 5.60 x 1 1.77 x 0.22 x 0.04	48 x 4 x 1 1.89 x 0.16 x 0.04	30 x 6 x 1 1.18 x 0.24 x 0.04	68 x 13 x 1 2.68 x 0.51 x 0.04	ø 0.98 x 0.04 ø 25 x 1
Material	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock	White thermal transfer face stock
Mounting	Industrial adhesive	Industrial adhesive	Industrial adhesive	Industrial adhesive	Industrial adhesive	Industrial adhesive
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C
Survival Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C
IP rating	IP68	IP68	IP68	IP68	IP68	IP68

Global Frequency

The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global). HF 13.56 MHz.

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XSKIN Series - specialty labels



	XSKIN Theta		XSKIN Gamma 73x20	
Application	Precision RFID for Injection Molding		Durable RFID for Gamma Irradiation	
Part number	X7101-GL100-H3		X7320-GL011-KX2005X	
Frequency	Global		Global	
IC type	Alien Higgs 3		Kiloway	
EPC Memory: TID USER	96 bits 96 bits 512 bits		128 bits (configurable from 96 to 240 bits) 96 bits 1312 bits	
Read range (fixed)	Up to 9 m / 29.53 ft		Up to 16 m / 52.49 ft	
				
Affixes to	Non metal surface		Non metal surface	
Dimensions: mm in	71 x 11 x 0.13 2.80 x 0.43 x 0.005		73 x 20 x 0.16 2.87 x 0.79 x 0.01	
Material	FPC		Printable white paper	
Mounting	Injection molding, Embedded 		Industrial adhesive	
Operational Temperature	-40°F to +212°F -40°C to +100°C		50°F to +104°F 10°C to +40°C	
Survival Temperature	-40°F to +446°F -40°C to +230°C		-40°F to +185°F -40°C to +85°C	
IP rating	IP68		-	

 High Temp
  User Memory
  Embeddable
  Global Frequency
  Long Range

The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global).

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XENSE Series - passive sensing



	XENSE Temp	XENSE Strain	
Application	Battery-Free Concrete Curing 	Infrastructure Monitoring 	
Part number	X90A0-US100-AS3211 X90A0-EU100-AS3211	X90A2-US100-AS3213S X90A2-EU100-AS3213S	
Frequency	US, EU	US, EU	
IC type	Asygn AS3211	Asygn AS3213S	
EPC Memory: TID USER	192 bits 48 bits 32 bits	192 bits 16 bits 96 bits 	
Read range (fixed)	Up to 4.50 m / 14.76 ft in concrete	Up to 2 m / 6.56 ft in concrete	
Affixes to	Metal / non metal surface	Metal / non metal surface	
Dimensions: mm in	100 x 26 x 8.90 3.94 x 1.02 x 0.35	131.60 x 30.80 x 7.50 5.18 x 1.21 x 0.30	
Material	Industry polymer, Copper	Industry polymer	
Mounting	Casting, Rivets M4 Screws M4, Cable ties Industrial adhesive (optional) 	Casting, Rivets M4 Screws M4, Cable ties Industrial adhesive (optional) 	
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	
Survival Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +248°F -40°C to +120°C	
IP rating	IP68	IP68	

 User Memory  Embeddable

The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global).
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NFC Series - smart tracking



	RTI OUTDOOR NFC	Titanium 25 HF	DATABAND2 NFC	
Application	Dual-Frequency For Asset Tracking 	Durable NFC Labeling 	Dual UHF+NFC Durable Tag For Tubulars 	
Part number	X0316-US110-NTAG213 X0316-EU110-NTAG213	X2525-HF011-FM1108	X3819-US100-U8 X3819-EU100-U8	
Frequency	US, EU, HF	HF	US, EU, HF	
IC type	Impinj Monza R6-P (UHF) NXP NTAG213 (HF)	FM1108	NXP UCODE 8 (UHF) ICODE SLIX (HF)	
EPC Memory: TID USER	128/96 bits 96 bits 32/64 bits (UHF) 7 bytes UID, 144 bytes user memory (HF)	64 bits (HF)	128 bits 96 bits (UHF) 64 bits UID 896 bits UID, 144 bytes user memory (HF)	
Read range	Up to 8 m / 29.53 ft (UHF) Up to 1 cm / 0.03 ft (HF)	Up to 0.05 m / 0.16 ft (HF)	Up to 3 m / 9.84 ft	
Affixes to	Metal surface	Metal surface	Metal surface	
Dimensions: mm in	73.30 x 22.80 x 8.65 2.88 x 0.90 x 0.34	ø 25 x 1 ø 0.98 x 0.04	38.10 x 19.09 x 6.35 2.88 x 0.90 x 0.34	
Material	Anti-UV industry polymer	White thermal transfer face stock	PC/PBT alloy, glue	
Mounting	Rivets M3 Cable ties (optional) Industrial adhesive (optional)	Industrial adhesive	Band	
Operational Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	
Survival Temperature	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +85°C	-40°F to +185°F -40°C to +125°C 	
IP rating	IP68	IP68	IP68	



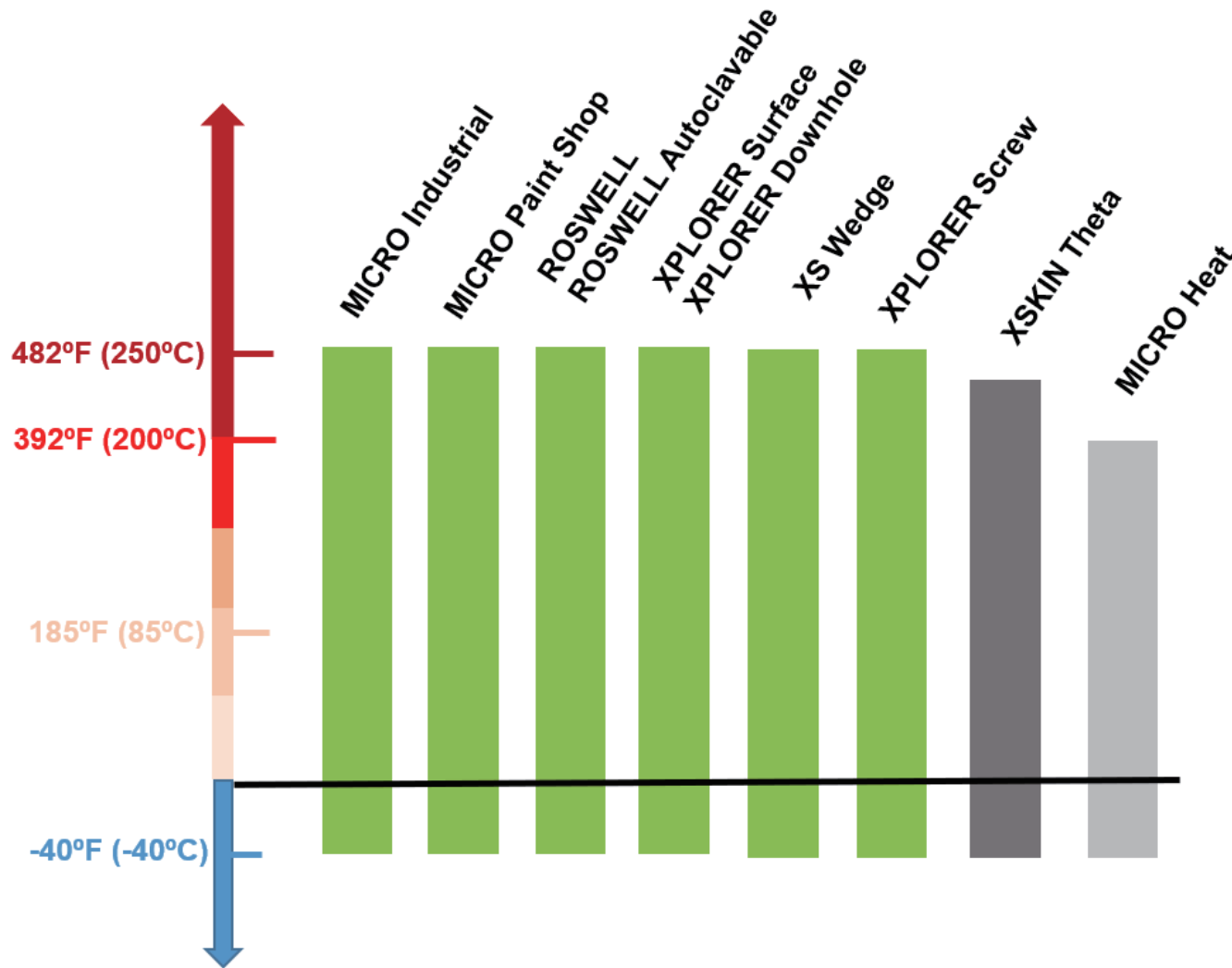
High Temp

The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global). HF 13.56 MHz.

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Xerafy High Temperature RFID Tags And Inlay

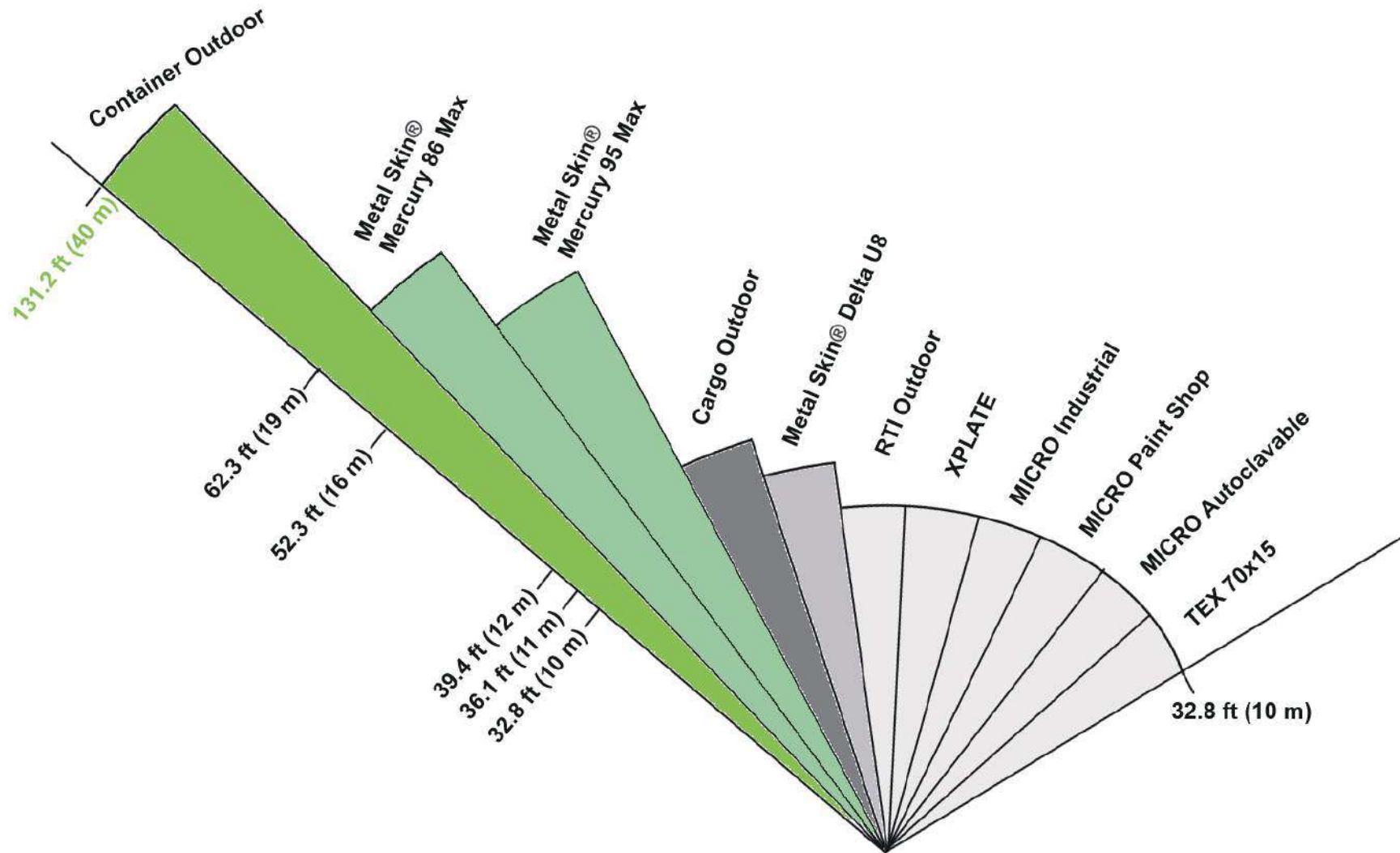
Application temperature over 392°F (200°C)



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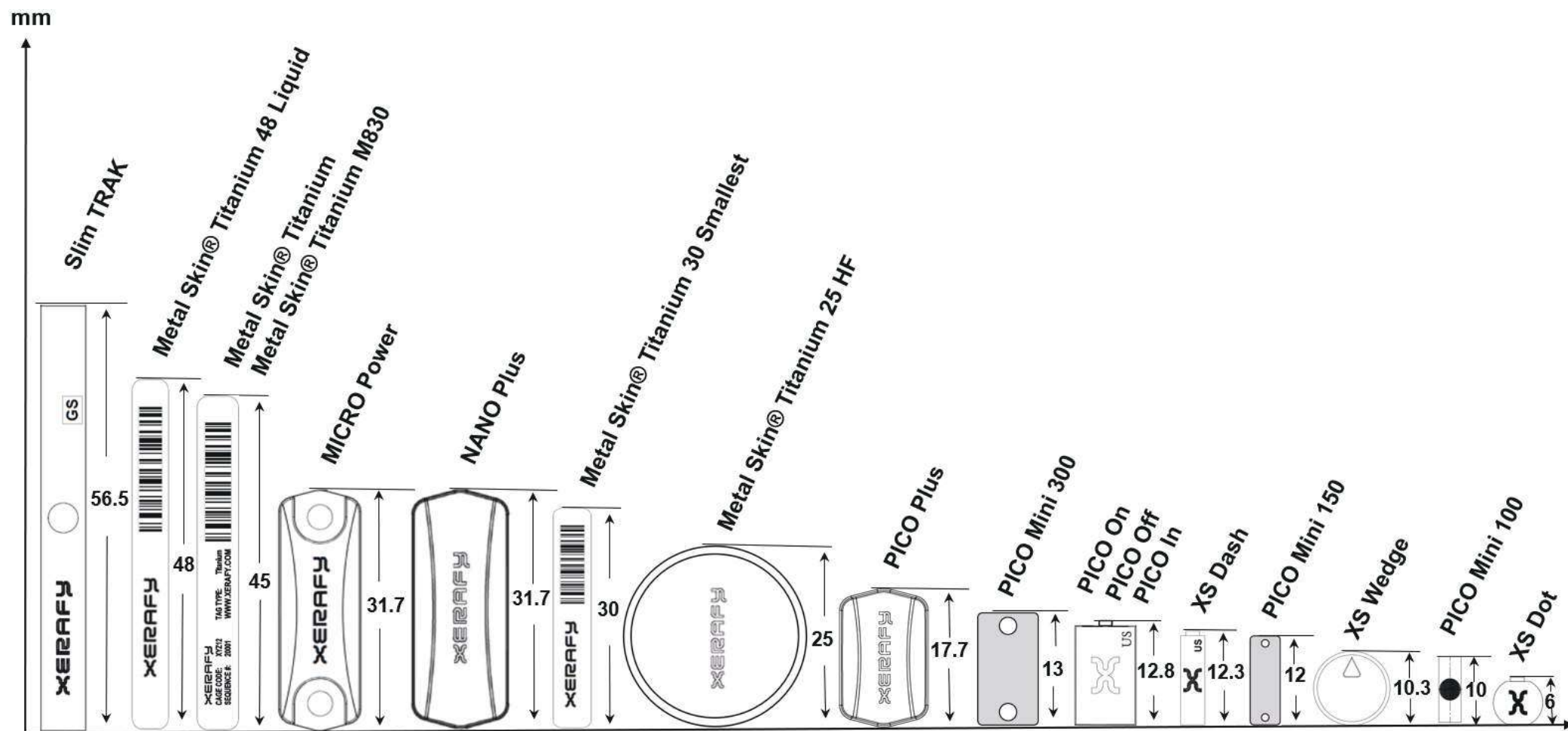
Xerafy Long-Range RFID Tags And Label

Read range is tested on metal with fixed reader (2W ERP)



This guide serves as a reference for comparison purposes exclusively. For more comprehensive information, please refer to the product specifications provided in the datasheets.

Xerafy Small Footprint RFID Tags and Labels



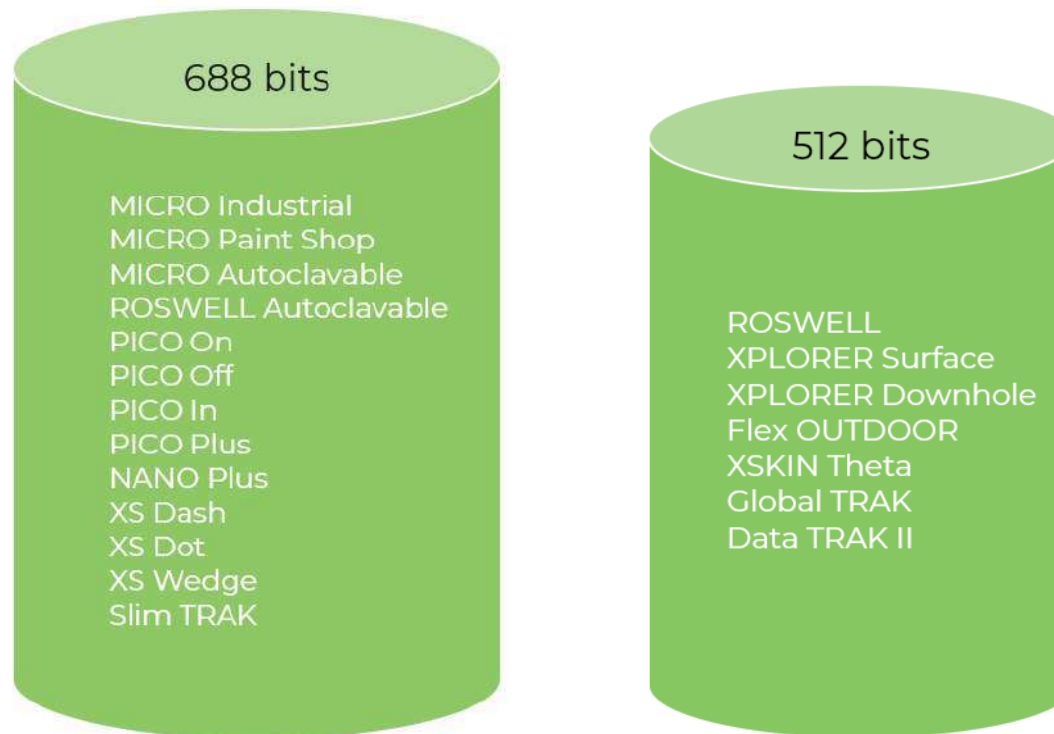
This guide serves as a reference for comparison purposes exclusively. For more comprehensive information, please refer to the product specifications provided in the datasheets.

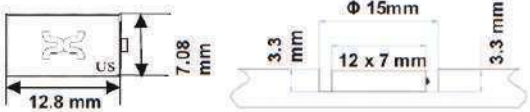
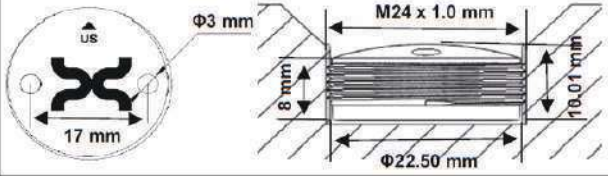
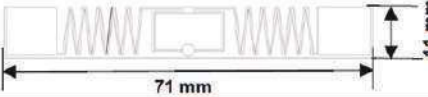
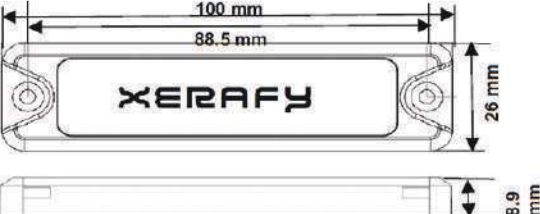
Xerafy High User Memory RFID Tags and Labels

Types of Memory in RFID Tags

1. **RESERVED MEMORY** - This memory bank stores the kill password and the access password (each are 32 bits).
2. **TID MEMORY** - The Tag ID is a serial number that is unique to the chip and cannot be altered.
3. **EPC MEMORY** - The Electronic Product Code can be re-programmed, protected with a password, and also permanently locked.
4. **USER MEMORY** - Some chips offer extended user memory which is typically used when EPC memory is not enough.

High User Memory RFID Tags and Labels



Products	Embedding Recommendations	Embedding Methods	Applicable Materials
XS Wedge 	1. Make a plane on the surface (Length ≥ 12 mm * Width ≥ 12 mm). 2. Drilling - Make a flat bottom groove on the metal surface 10 mm * 5 mm). 3. Position - Put $\frac{1}{2}$ of the XS Wedge into the groove and adjust the tag's direction according to the object size. 4. Insertion - Drive the remaining $\frac{1}{2}$ of the tag into the groove, using a hammer or similar tool.	Flush mounting Seal-in	Metal
Pico In 	Click to watch the instruction video.	Flush mounting Seal-in	Metal
XPLORER Download XPLORER Surface 	Click to watch the instruction video.	Flush mounting Seal-in	Metal
XPLORER Screw 	Click to watch the instruction video.	Flush mounting Screw-in	Metal
XSKIN Theta 	Designed to work with a wide range of thermoplastic resins and to be compatible with a large number of molding processes for temperatures of up to 230°C.	Injection molding Compression molding	Plastics
XENSE Temp Concrete 	Fix the tag to the metal rebars using cable ties and embedded in concrete.	Casting	Concrete Rebars Plaster

Xerafy High User Memory RFID Tags and Labels



Xerafy offers a Custom RFID tag development service drawing on a 14 year-long expertise in RF technology and industrial asset tracking systems. Xerafy lets you build your RFID System on the company's unparalleled reputation for first-class durable, passive, on-metal tags and labels. Our Custom RFID Tags co-development approach ensures you start in no time with the support you need at every step of the process:

1. **KEY FEATURES** - Identifying the application environment and the level of performance to be achieved allows for effective validation of the custom design's MVP
2. **FEASIBILITY** - A technical and financial assessment provides the data required to finalize the business case and confirm the expected ROI
3. **PROTOTYPING** - Incremental innovation to achieve the performance required
4. **DEPLOYMENT** - Manufacturing, shipping, and full support throughout

Xerafy Service Bureau

Chose from a full range of customization services available to personalize off-the-shelf RFID tags, labels, inlays, and sensors.

- **Readable** identifications - Serial numbers, text, custom colors, logos
- **Optical** identifications - Barcodes, QR Codes
- **Encoding** - Unique ID numbers, serialized or unserialized, written in the memory of the chip

RFID Labels are specifically designed to be personalized in the field, with the leading Industrial RFID printers from SATO, Zebra, TSC, Postek... able to print and encode at the same time, at scale.

Customized physical markings are available with various levels of durability to suit every use case:

- **Painting**
- **Printing**, for labels
- **Laser marking**, for hard tags.

[Talk To An Expert](#)

Industry Certification and Compliance



CE Certification



ATEX Certification



ISO 9001:2015



ISO 14001:2015



Awards



Industry



Tool Tracking



- Tool Control FOD
- Tool Inventory Management
- Tooling and Equipment
- MRO Parts
- MRO Inventory Management

Oil & Gas



- Drill Pipe Tracking and Lifecycle
- Downhole Tools Drill Bits
- Oilfield Casing Tubing (OCTG)
- Rigging and Lifting Equipment
- Pipeline and Valve Inspections
- LPG Cylinders

Healthcare



- Sterile Processing
- Loaner Systems
- Point-Of-Care Equipment
- Pharmacy Inventory
- Storeroom Supplies
- Scrubs & Linens

Manufacturing



- Paint Shop Automotive
- Hi-Temp Processes
- Injection Molding
- Industrial Molds Dies

Inventory



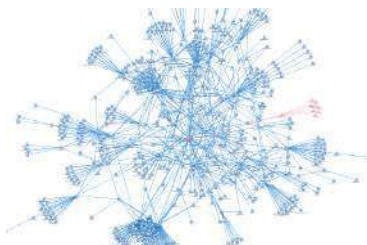
- Automated Warehouse
- Returnable Packaging Carriers
- Materials Management
- Work-In-Process

Logistics



- Returnable Transport Packaging
- Order Fulfillment
- Yard Management Systems
- Last-Mile Logistics

Supply Chains



- Consignment Inventory
- Source Tagging
- Cold Chain Monitoring

Data Centers



- Asset Management
- Inventory and Audit
- Infrastructure Management

IT Assets



- IT Equipment
- Inventory Scanners
- Laboratory Equipment

Utilities



- Waste Management
- Weapon Tracking
- Tower Monitoring
- Infrastructure Monitoring