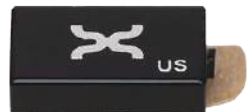


XERAFY



The Ultimate Industrial RFID Product Guide

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



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.

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



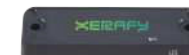
IOT

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-U9xm X1130-EU100-U9xm	X1130-US130-U9xm X1130-EU130-U9xm	X1130-US140-U9xm X1130-EU140-U9xm	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	NXP UCODE 9xm	NXP UCODE 9xm	NXP UCODE 9xm	NXP UCODE 9	Impinj M750	Alien Higgs 4
EPC Memory: TID USER	128/496 bits 96 bits 752/384 bits	128/496 bits 96 bits 752/384 bits	128/496 bits 96 bits 752/384 bits	96 bits 96 bits -	96 bits 96 bits 32 bits	128 bits 96 bits 128 bits
Read range on metal	Up to 15 m / 49.21 ft	Up to 15 m / 49.21 ft	Up to 15 m / 49.21 ft	Up to 4 m / 13.12 ft	Up to 4 m / 13.12 ft	Up to 4 m / 13.12 ft
Read range off metal	-	-	-	Up to 7 m / 22.97 ft	-	-
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	-67°F to +419°F -55°C to +215°C
IP rating	IP68	IP68	IP68, IP69K	IP68, IP69K	IP68	IP68

High Temp User Memory Autoclavable Long Range

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

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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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-M830 X3110-EU001-M830	X3310-US001-M830 X3310-EU001-M830	X1035-USP00-U8 X1035-EUP00-U8	X1204-USP00-U8 X1204-EUP00-U8	X1307-USP00-U8 X1307-EUP00-U8	X3210-US000-M830 X3210-US000-M830	X3110-US101-M830 X3110-EU101-M830	X1120-US101-U9xm X1120-EU101-U9xm
Frequency	US, EU	US, EU	US, EU			US, EU	US, EU	US, EU
IC type	Impinj M830	Impinj M830	NXP UCODE 8			Impinj M830	Impinj M830	NXP UCODE 9xm
EPC Memory: TID USER	128 bits 96 bits	128 bits 96 bits	128 bits 96 bits -			128 bits 96 bits	128 bits 96 bits	128/496 bits 96 bits 752/384 bits
Read range on metal	Up to 6 m / 19.69 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 3 m / 9.84 ft embedded	Up to 6 m / 19.69 ft	Up to 10 m / 32.81 ft
Read range off metal	-	Up to 2 m / 6.56 ft	-			-	-	-
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 Long Range

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

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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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-M830 X4101-EU000-M830	X4102-US000-U9xm X4102-EU000-U9xm	X4202-US100-U9xm X4202-EU100-U9xm	
Frequency	US, EU	US, EU	US, EU	
IC type	Impinj M830	NXP UCODE 9xm	NXP UCODE 9xm	
EPC Memory: TID USER	128 bits 96 bits	128/496 bits 96 bits 752/384 bits	128/496 bits 96 bits 752/384 bits	
Read range on metal	Up to 4.50 m / 14.76 ft	Up to 4 m / 13.12 ft	Up to 1.40 m / 4.59 ft embedded	
Read range off metal	-	-	-	
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

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

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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ROSWELL Series - ultra rugged



	ROSWELL Autoclavable	XPLORER Screw	XPLORER Surface		
Application	World's Most Rugged Tag	Screw-In RFID Tag for Tubulars	The Toughest Embeddable RFID Tag		
Part number	X1114-US143-H9 X1114-EU143-H9	X1116-US120-U9 X1116-EU120-U9	X1115-US111-H3 X1115-EU111-H3		
Frequency	US, EU	US, EU	US, EU		
IC type	Alien Higgs 9	NXP UCODE 9	Alien Higgs 3		
EPC Memory: TID USER	96 bits 96 bits 688 bits	96 bits 96 bits -	96/480 bits 96 bits 512 bits		
Read range on metal	Up to 5 m / 16.40 ft	Up to 5 m / 16.40 ft embedded	Up to 1.50 m / 4.92 ft		
Read range off metal	-	-	-		
Dimensions: mm in	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		
Material	Stainless steel, High-performance engineered polymer	Industry grade polymer	Stainless steel 316L, High-performance engineered polymer		
Mounting	Welding, Rivets M4, Screws M4, Cable ties	Screw 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		
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		
IP rating	IP68, IP69K	IP68, IP69K	IP68, IP69K		

High Temp
 User Memory
 Autoclavable
 Embeddable

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

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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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 on metal	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
Read range off metal	-	-	-	-	-
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

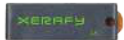
High Temp User Memory

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

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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TRAK Series - inventory



	Circular TRAK	Versa TRAK	Slim TRAK	Global TRAK	
Application	The Best Choice for Circular Economy	First Choice For Versatile Options	Best Choice For A Slimmer Tag	Best Choice For Global Visibility	
Part number	X0553-US170-R6P X0553-EU170-R6P	X0350-GL011-M750	X0330-GL001-H9	X0340-GL021-M4QT	
Frequency	US, EU	Global	Global	Global	
IC type	Impinj Monza R6-P	Impinj M750	Alien Higgs 9	Impinj M4QT	
EPC Memory: TID USER	128/96 bits 96 bits 32/64 bits	96 bits 96 bits 32 bits	96 bits 96 bits 688 bits	128 bits 96 bits 512 bits	
Read range on metal	Up to 2.30 m / 7.55 ft	Up to 9 m / 29.53 ft	Up to 2 m / 6.56 ft	Up to 2.50 m / 8.20 ft	
Read range off metal	Up to 1.30 m / 4.27 ft	Up to 3 m / 9.84 ft	Up to 1.50 m / 4.92 ft	Up to 1.80 m / 5.91 ft	
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	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	
Mounting	Food grade silicone glue	Industrial adhesive Cable ties (optional)	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	
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 +302°F -40°C to +150°C	-40°F to +185°F -40°C to +85°C	
IP rating	IP68	IP68	IP68	IP68	

High Temp User Memory Global Frequency

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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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 on metal	-	-	-	
Read range off metal	Up to 17 m / 55.77 ft	Up to 10 m / 32.81 ft	Up to 6 m / 19.69 ft	
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

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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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 on metal	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	-
Read range off metal	Up to 5 m / 16.40 ft	Up to 25 m / 82.02 ft	Up to 6 m / 19.69 ft	Up to 8 m / 26.25 ft	Up to 7.50 m / 24.61 ft
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

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

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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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 on metal	-	-	-	-	
Read range on textile	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	
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 +410°F -40°C to +210°C (20 seconds)	-40°F to +410°F -40°C to +210°C (20 seconds)	-40°F to +410°F -40°C to +210°C (20 seconds)	-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).

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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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 on metal	Up to 10 m / 32.81 ft	Up to 10 m / 32.81 ft	
Read range off metal	Up to 6 m / 19.69 ft	Up to 6 m / 19.69 ft	
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 grade polymer Aluminum / stainless steel plate	Industry grade 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.
 The read range is based on fixed reader and may vary depending on environmental factors and reader output power.
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Metal Skin® Series - durable labels



IMPINJ

	Mercury 86 Max	Mercury 95 Max	Delta	Platinum	Platinum 55 Universal	Platinum 60 Max
Application	Max Range with Impinj	Max Range with NXP	The Thinnest On-Metal Labels	Universal Labeling Solutions	For IT Assets	Max Range
Part number	X8654-US011-R6P	X9522-US011-U8 X9522-EU011-U8	X7030-US011-M830 X7030-EU011-M830	X50A3-US011-U9 X50A3-EU011-U9	X5515-US011-U8	X6025-US011-U8
Frequency	US	US, EU	US, EU	US, EU	US	US
IC type	Impinj Monza R6-P	NXP UCODE 8	Impinj M830	NXP UCODE 9	NXP UCODE 8	NXP UCODE 8
EPC Memory: TID USER	128/96 bits 96 bits 32/64 bits	128 bits 96 bits -	128 bits 96 bits -	96 bits 96 bits -	128 bits 96 bits -	128 bits 96 bits -
Read range on metal	Up to 13 m / 42.65 ft	Up to 11 m / 36.09 ft	Up to 3.50 m / 11.48 ft	Up to 5 m / 16.40 ft	Up to 6 m / 19.69 ft	Up to 7.50 m / 24.61 ft
Read range off metal	Up to 10 m / 32.81 ft	Up to 9.60 m / 31.50 ft	Up to 2.50 m / 8.20 ft	Up to 2 m / 6.56 ft	Up to 2.50 m / 8.20 ft	Up to 1 m / 3.28 ft
Dimensions: mm in	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	58.50 x 19 x 1 2.30 x 0.75 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
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 +248°F -40°C to +120°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).

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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Metal Skin® Series - durable labels



	Platinum 60 Tamper	Platinum 64 Slim	Titanium M830	Titanium 30 Smallest	Titanium 25 HF	
Application	For Tamper Proof	For Slim Labeling	Smallest Supports Gen2X	Market Smallest	For HF Tracking	
Part number	X6025-UST11-U9 X6025-EU111-U9	X6406-US011-U8 X6406-EU011-U8	X5220-US100-M830 X5220-EU100-M830	X3006-US011-U9xe X3006-EU011-U9xe	X2525-HF011-NTAG213	
Frequency	US, EU	US, EU	US, EU	US, EU	HF	
IC type	NXP UCODE 9	NXP UCODE 8	Impinj M830	NXP UCODE 9xe	NXP NTAG213	
EPC Memory: TID USER	96 bits 96 bits -	128 bits 96 bits -	128 bits 96 bits -	128 bits 96 bits -	56 bits UID 1152 bits user memory	
Read range on metal	Up to 4.50 m / 14.76 ft	Up to 4 m / 13.12 ft	Up to 3.50 m / 11.48 ft	Up to 1.80 m / 5.91 ft	Up to 0.05 m / 0.16 ft (HF)	
Read range off metal	-	Up to 4.50 m / 14.76 ft on liquid	Up to 2 m / 6.56 ft	Up to 0.90 m / 2.95 ft	-	
Dimensions: mm in	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	45 x 5.60 x 1 1.77 x 0.22 x 0.04	30 x 6 x 1 1.18 x 0.24 x 0.04	ø 25 x 1 ø 0.98 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	
Mounting	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	
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	
IP rating	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).

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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XSKIN Series - specialty labels



XSKIN Gamma 73x20		
Application	Durable RFID for Gamma Irradiation	
Part number	X7320-GL011-KX2005X	
Frequency	Global	
IC type	Kiloway	
EPC Memory: TID USER	128 bits (configurable from 96 to 240 bits) 96 bits 1312 bits	
Read range on metal	-	
Read range off metal	Up to 16 m / 52.49 ft	
Dimensions: mm in	73 x 20 x 0.16 2.87 x 0.79 x 0.01	
Material	Printable white paper	
Mounting	Industrial adhesive	
Operational Temperature	50°F to +104°F 10°C to +40°C	
Survival Temperature	-40°F to +185°F -40°C to +85°C	
IP rating	-	

Global Frequency User Memory Long Range

The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global).
 The read range is based on fixed reader and may vary depending on environmental factors and reader output power.
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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 on metal	Up to 2 m / 6.56 ft	Up to 1.50 m / 4.92 ft	
Read range off metal	Up to 4.50 m / 14.76 ft in concrete	Up to 2 m / 6.56 ft in concrete	
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).

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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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-NTAG213	X3819-US100-U8 X3819-EU100-U8	
Frequency	US, EU, HF	HF	US, EU, HF	
IC type	Impinj Monza R6-P (UHF) NXP NTAG213 (HF)	NXP NTAG213	NXP UCODE 8 (UHF) ICODE SLIX (HF)	
EPC Memory: TID USER	128/96 bits 96 bits 32/64 bits (UHF) 56 bits UID, 1152 bits user memory (HF)	56 bits UID 1152 bits user memory	128 bits 96 bits (UHF) 64 bits UID 896 bits user memory (HF)	
Read range on metal	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	
Read range off metal	-	-	-	
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

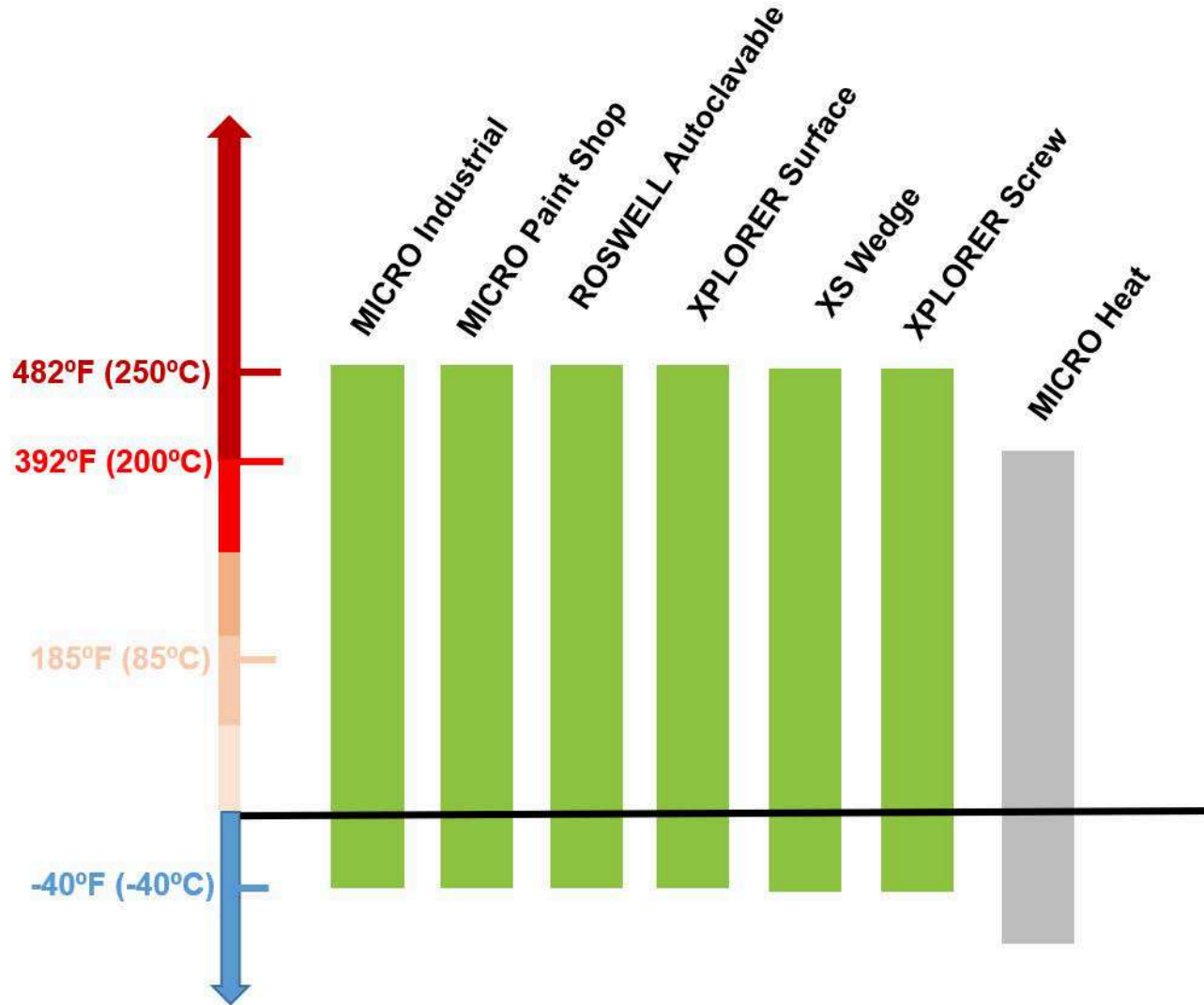
The frequency is following RAIN RFID Standard: US 902-928 MHz (FCC), EU 865-868 MHz (ETSI), 860-960 MHz (Global). HF 13.56 MHz.

The read range is based on fixed reader and may vary depending on environmental factors and reader output power.

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Xerafy High Temperature RFID Tags And Inlay

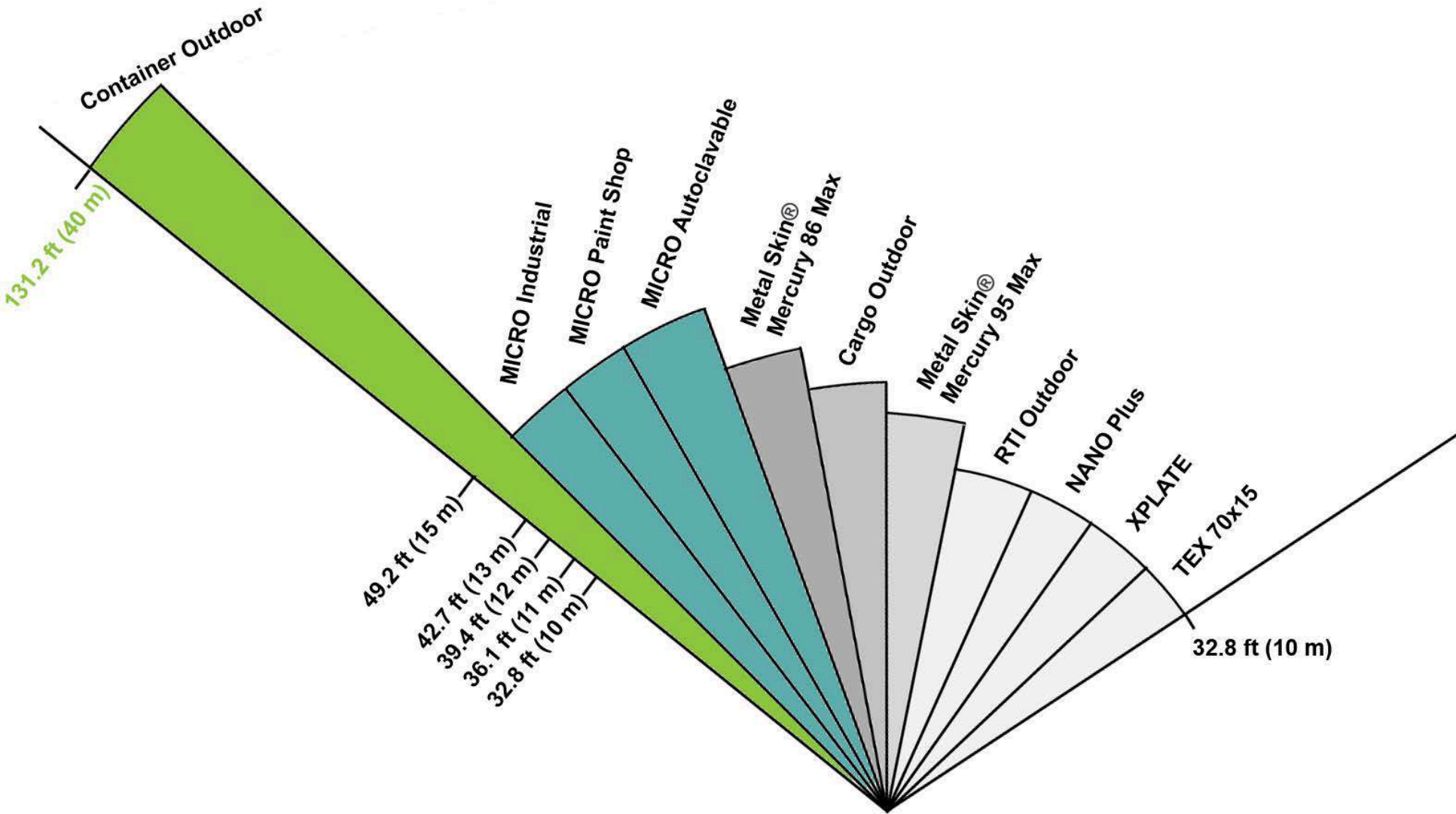
Application temperature over 392°F (200°C)



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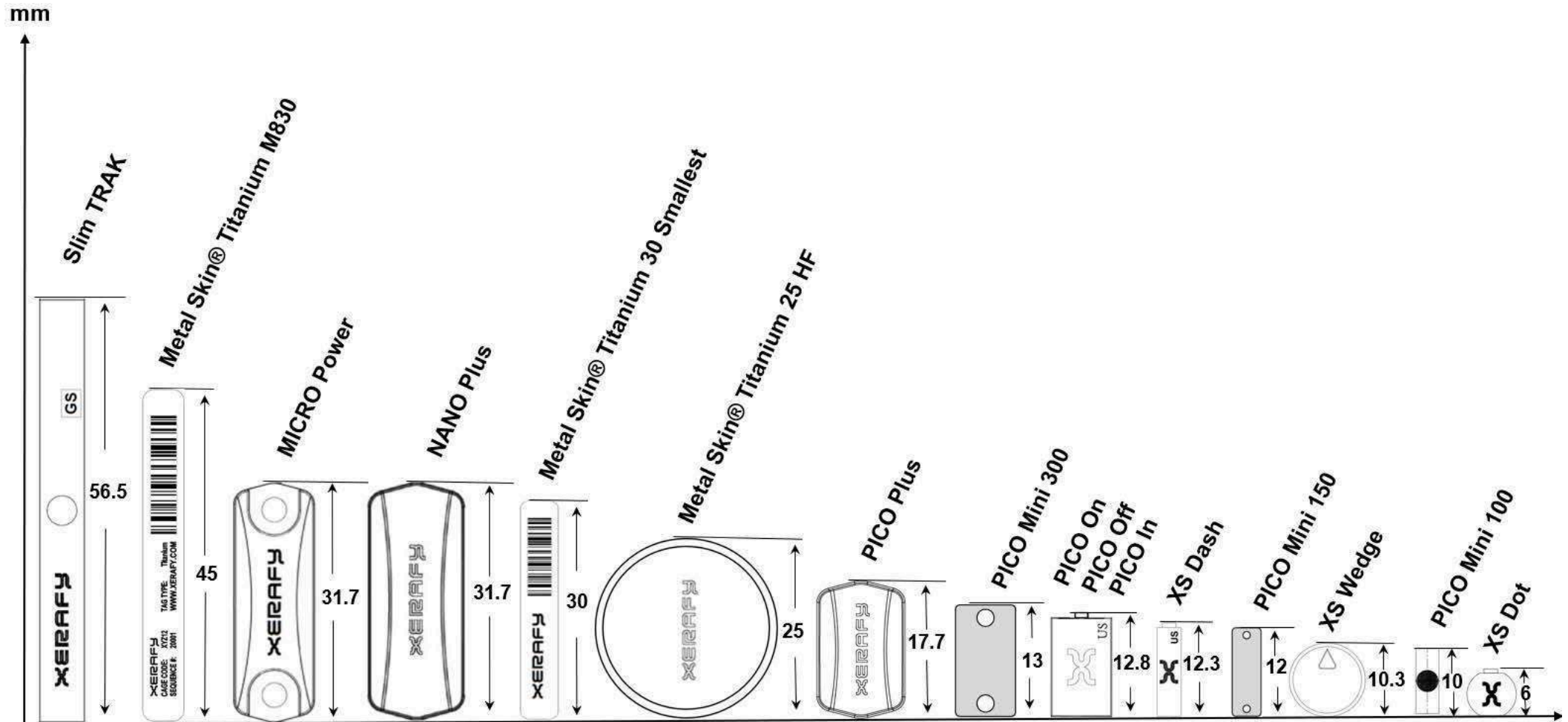
Xerafy Long-Range RFID Tags And Label

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



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Xerafy Small Footprint RFID Tags and Labels



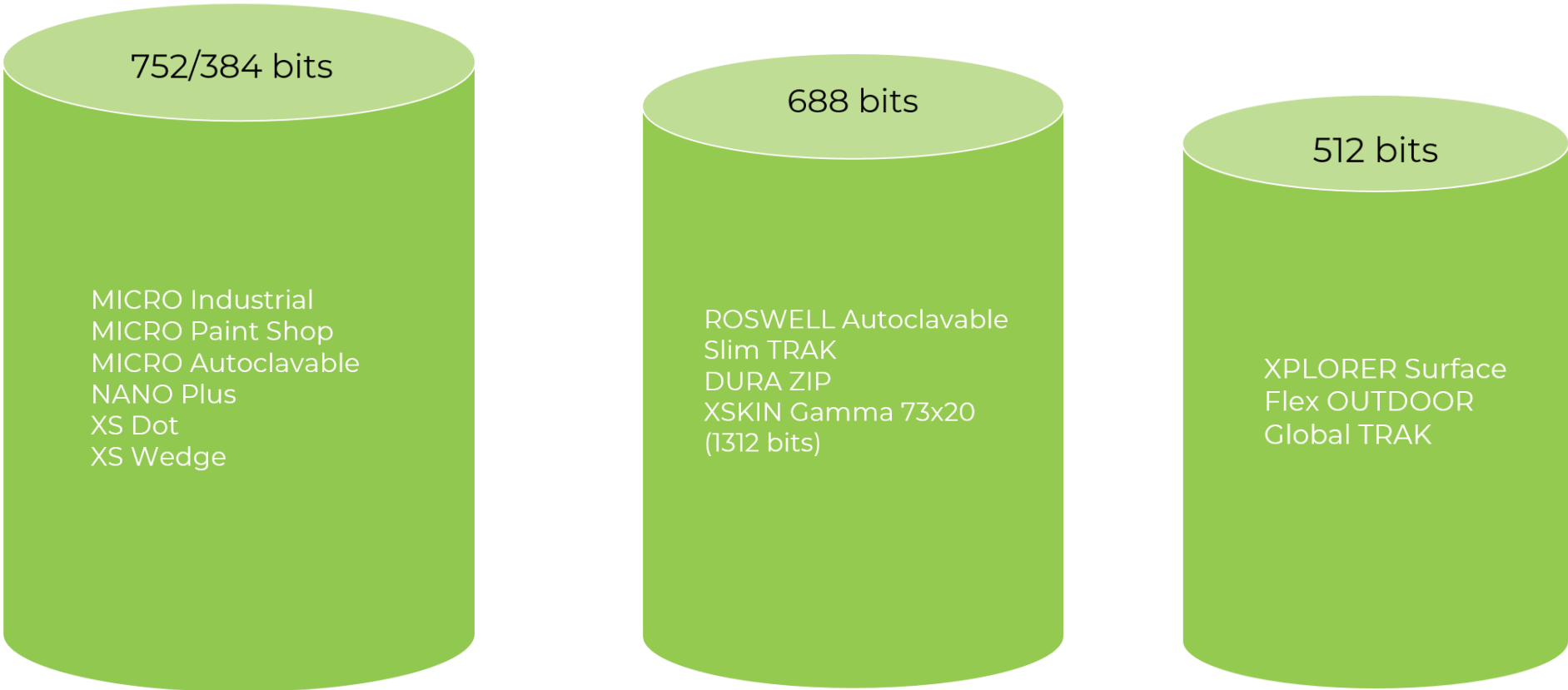
This guide serves as a reference for comparison purposes exclusively. For more comprehensive information, please refer to the product specifications provided in the datasheets.

Xerafy High User Memory RFID Tags and Labels


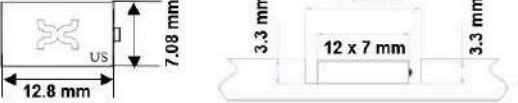
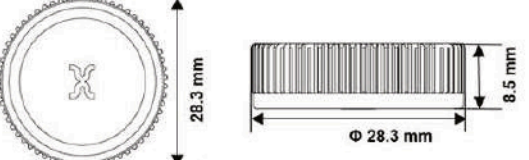
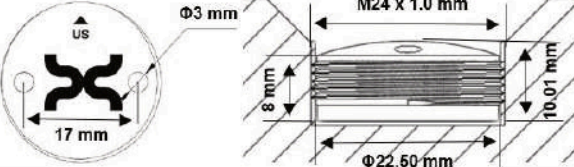
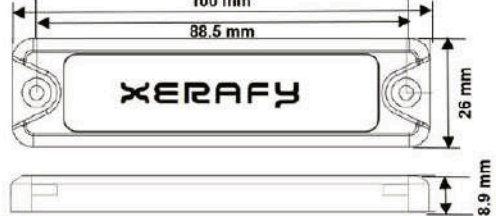
Types of Memory in RFID Tags

- 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



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

Products	Embedding Recommendations	Embedding Methods	Applicable Materials
XS Wedge 	<ol style="list-style-type: none"> 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). 2. Position - Put $\frac{1}{2}$ of the XS Wedge into the groove and adjust the tag's direction according to the object size. 3. 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 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
XENSE Temp Concrete 	Fix the tag to the metal rebars using cable ties and embedded in concrete.	Casting	Concrete Rebars Plaster

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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.

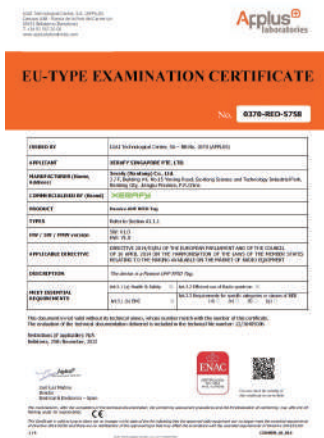
- **Readable** identifications - Serial numbers, text, custom colors, logos
- **Optical** identifications - Barcodes, QR Codes
- **Encoding** - Unique ID numbers, serialized or unserialized, written in the memory of the chip

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.

Industry Certification and Compliance



CE Certification



ATEX Certification



ISO 9001:2015



ISO 14001:2015



Awards



Industry



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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



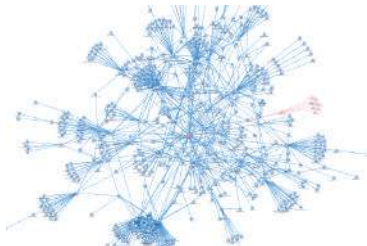
- Automated Warehouse
- Returnable Packaging Carriers
- Materials Management
- Work-In-Process

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

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