













Series	Apollo Series		Pluto Series		Bit series			
	Apollo	Apollo Panitshop	Pluto	Pluto Embed	Bit Alpha	Bit Beta	Bit Gamma	Bit Gamma Autoclavable
Product								
Applications	<ul style="list-style-type: none"> Industrial manufacturing Railway assets tracking Oven process mangaeament Chemical Container Tracking 	<ul style="list-style-type: none"> Automotive paint shop Automotive manufacturing 	<ul style="list-style-type: none"> IT assets management Hand tool tracking Production Jigs management Weapon management 	<ul style="list-style-type: none"> Pipelines tracking Hand tools tracking Packaging 	<ul style="list-style-type: none"> Hand tools tracking Surgical instruments tracking Weapon management Mould assets management 	<ul style="list-style-type: none"> Small tools tracking Surgical instruments tracking Weapon management Mould assets management 	<ul style="list-style-type: none"> Minimal tools tracking Surgical instruments tracking Minimal parts source Tracking 	<ul style="list-style-type: none"> Surgical instruments tracking Medical tool tracking Medical parts source tracking Artificial limb tracking
Operating frequency	902-928 MHz (US) 865-868 MHz (EU)	902-928 MHz (US) 865-868 MHz (EU)	902-928 MHz (US) 865-868 MHz (EU)	902-928 MHz (US) 865-868 MHz (EU)	902-928 MHz (US) 865-868 MHz (EU)	902-928 MHz (US) 865-868 MHz (EU)	902-928 MHz (US) 865-868 MHz (EU)	902-928 MHz (US) 865-868 MHz (EU)
Chip type	Higgs-3	Higgs-3	Higgs-3	Higgs-3	Higgs-3	Higgs-3	Higgs-3	Monza R6
Memory size	96-EPC Bits extensible to 480 Bits, 512-User Bits, 64-Bit Unique TID	96-EPC Bits extensible to 480 Bits, 512-User Bits, 64-Bit Unique TID	96-EPC Bits extensible to 480 Bits, 512-User Bits, 64-Bit Unique TID	96-EPC Bits extensible to 480 Bits, 512-User Bits, 64-Bit Unique TID	96-EPC Bits extensible to 480 Bits, 512-User Bits, 64-Bit Unique TID	96-EPC Bits extensible to 480 Bits, 512-User Bits, 64-Bit Unique TID	96-EPC Bits extensible to 480 Bits, 512-User Bits, 64-Bit Unique TID	96-EPC bits, 48-bit unique TID
Read range on metal (2W ERP)	Up to 39.6 ft (12 m)	Up to 46 ft (12 m)	Up to 11.5 ft (3.5 m)	Up to 8.2 ft (2 m)	Up to 8.2 ft (2.5 m)	Up to 4.9 ft (1.5 m)	Up to 4.9 ft (1.5 m)	Up to 4.9 ft (1.5 m)
Read range off metal (2W ERP)	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited
Dimensions	58.3 x 42.3 x 9.5 ±0.5 mm (2.3 x 1.67 x 0.37 ±0.02 in)	58.3 x 42.3 x 9.5 ±0.5 mm (2.3 x 1.67 x 0.37 ±0.02 in)	12 x 6.8 x 3.2 ±0.2 mm (0.46 x 0.27 ±0.01 in)	12 x 6.8 x 3.2 ±0.2 mm (0.46 x 0.27 ±0.01 in)	10.2 x 3.0 x 2.2 ±0.2 mm (0.4 x 0.12 x 0.087 ±0.008 in)	(Ø 5.5 x 2.6 ±0.2 mm) (0.22 x 0.1 ±0.008 in)	7.5 x 2.5 x 2.0 ±0.2 mm (0.3 x 0.1 x 0.08 ±0.008 in)	7.5 x 2.5 x 2.0 ±0.2 mm (0.3 x 0.1 x 0.08 ±0.008 in)
Weight	0.92 oz (26 g)	0.92 oz (26 g)	0.04 oz (1.14 g)	0.04 oz (1.14 g)	0.025 oz (0.36 g)	0.01 oz (0.29 g)	0.012 oz (0.34 g)	0.012 oz (0.34 g)
Material	High performance Engineering polymer	High performance Engineering polymer	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic
Mounting system	<ul style="list-style-type: none"> Screws (M4.5) Rivet hole (Ø 4 mm) Adhesive (optional) 	<ul style="list-style-type: none"> Screws (M4.5) Rivet hole (Ø 4 mm) Adhesive (optional) 	High performance adhesive(Std)	Embed with adhesive	Epoxy/adhesive	Epoxy/adhesive	Epoxy/adhesive	Epoxy/adhesive
Operating 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)	-40°F to +185°F (-40°C to +85°C)	-40°F to +185°F (-40°C to +85°C)
Survive temperature	-40°F to +500°F (-40°C to +260°C)	-40°F to +500°F (-40°C to +260°C)	-58°F to +392°F (-50°C to +200°C)	-58°F to +392°F (-50°C to +200°C)	-58°F to +392°F (-50°C to +200°C)	-58°F to +392°F (-50°C to +200°C)	-58°F to +392°F (-50°C to +200°C)	-58°F to +392°F (-50°C to +200°C)
IP classification	IP68	IP69K	IP68	IP68	IP68	IP68	IP68	IP68

Series	Log Series		Smartwave Series	
	Log	Log Global	Smartwave 880	Smartwave 660
Product				
Applications	<ul style="list-style-type: none"> • Container Logistics • Outdoor Device ULD identification • RTI Management • Warehousing 	<ul style="list-style-type: none"> • Global Container Tracking • Global RTI Management • Global Cargo 	<ul style="list-style-type: none"> • Office equipment • Indoor Device ULD identification • RTI Management • Retail and Warehousing 	<ul style="list-style-type: none"> • Office equipment • Indoor Device ULD identification • RTI Management • Retail and Warehousing
Operating frequency	902-928 MHz (US) 865-868 MHz (EU)	865-928 MHz (Global)	902-928 MHz (US) 865-868 MHz (EU)	902-928 MHz (US) 865-868 MHz (EU)
Chip type	Monza R6P	Monza M4QT	Monza R6P	Monza R6P
Memory size	96/128-EPC bits, 32/64-bit user memory, 48-bit unique TID	128-EPC Bits, 512-User Bits, 48-Bit Unique TID	96/128-EPC bits, 32/64-bit user memory, 48-bit unique TID	96/128-EPC bits, 32/64-bit user memory, 48-bit unique TID
Read range on metal (2W ERP)	Up to 49.5 ft (15 m)	Up to 33.3 ft (10 m)	Up to 26.4 ft (8 m)	Up to 19.8 ft (6M)
Read range off metal (2W ERP)	Up to 26.4 ft (8 m)	Up to 26.4 ft (6 m)	Up to 19.8 ft (6M)	Up to 13.2 ft (4M)
Dimensions	99.2 x 24 x 9.2 ±0.5 mm (3.89 x 0.95 x 0.36 ±0.02 in)	99.2 x 24 x 9.2 ±0.5 mm (3.89 x 0.95 x 0.36 ±0.02 in)	3.15 x 0.98 x 0.047 in (80 x 25 x 1.2 mm)	2.36 x 0.98 x 0.047 in (60 x 25 x 1.2 mm)
Weight	0.66 oz (18.8 g)	0.66 oz (18.8 g)	0.04 oz (1.12 g)	0.03 oz (0.85 g)
Material	Engineering plastic	Engineering plastic	PET	PET
Mounting system	<ul style="list-style-type: none"> • Screws (M4.5) • Rivet hole (ø 4 mm) • Adhesive (optional) • Cable tie 	<ul style="list-style-type: none"> • Screws (M4.5) • Rivet hole (ø 4 mm) • Adhesive (optional) • Cable tie 	High performance acrylic adhesive	High performance acrylic adhesive
Operating 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)	-22°F to +185°F (-30°C to +85°C)
Survive 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)
IP classification	IP68	IP68	IP67	IP67