IQ Range - Labels

Featured Comparison Guide











♠ High Temperature

Product Name IQ 150 **IQ** 350 **IQ 400P IQ 400P HT** IT, office, hospital asset tracking IT and office asset tracking Manufacturing Plastic facias's on IT equipment **Typical Applications** Weapons, pipes, road signs Logistics with metallic packaging Automotive paint processes Identification of IT & office hardware Warehouse management Intermodal logistics Electronics 902-928 (US) 902-928 (US) Frequency Range (MHz) 860-960 (GS) 860-960 (GS) 866-868 (EU) 866-868 (EU) Specifications Read Range (m) Up to 1.6 Up to 3.5 Up to 5.0 Up to 4.0 Fixed reader Up to 2.0 Up to 2.5 Up to 1.0 Up to 2.0 Handheld reader **Material Compatibility** Optimized for all materials Optimized for all materials Plastic & non-metallic substrates Plastic & non-metallic substrates IC Type Impinj Monza R6-P Impinj Monza R6-P Alien Higgs 3 Alien Higgs 3 **Encasement / Material** Synthetic label Synthetic label Synthetic label Synthetic label Physical and mental Specifications 55.0 × 12.5 × 1.20 50.0 × 12.5 × 1.30 $46.5 \times 12.4 \times 0.24$ 50.0 × 30.0 × 0.49 Size (mm) Weight (g) 0.44 0.50 0.15 0.51 -40 to +85 -40 to +85 -40 to +85 -40 to +85 Operating Temperature (°C) Max Temperature Exposure (°C) -40 to +85 -40 to +85 -40 to +85 -40 to +230 **Ingress Protection** IP68 IP68 IP68 IP68 Shock and Vibration MIL STD 810-G MIL STD 810-G MIL STD 810-G MIL STD 810-G Attachment Self Adhesive (std) Self Adhesive (std) Self Adhesive (std) Holes provided for mechanical attachment 055 - GS Order Codes[†] 125 - US. EU 158 - EU, US 166 – GS

⁺ Order option codes are listed on the datasheets.

IQ Range - Labels









♠ High Temperature

Product Name		IQ 600	IQ 800P	IQ 800P HT	
Typical A	Applications	Logistics & packaging, Pipe manufacturing & recertification IT, Office, & Hospital tracking	Plastic RTI's and containers Plastic pallets	Manufacturing Automotive paint processes Electronics	
Specifications	Frequency Range (MHz)	902-928 (US) 866-868 (EU)	860–960 (GS)	860-960 (GS)	
	Read Range (m) Fixed reader Handheld reader	Up to 6.0 Up to 3.0	Up to 10.0 Up to 5.0	Up to 8.0 Up to 5.0	
RF Sp	Material Compatibility	Optimized for all materials	Plastic & non-metallic substrates	Plastic & on-metallic substrates	
	ІС Туре	Impinj Monza R6-P	Alien Higgs 3	Alien Higgs 3	
	Encasement / Material	Synthetic label	Synthetic label	Synthetic label	
tions	Size (mm)	96.0 × 24.0 × 1.30	95.0 × 21.0 × 0.24	85.0 × 55.0 × 0.49	
nd cifica	Weight (g)	1.50	0.50	1.50	
Physical and Environmental Specifications	Operating Temperature (°C) Max Temperature Exposure (°C)	-40 to +85 -40 to +85	-40 to +85 -40 to +85	-40 to +85 -40 to +230	
	Ingress Protection	IP68	IP68	IP68	
	Shock and Vibration	MIL STD 810-G	MIL STD 810-G	MIL STD 810-G	
	Attachment	Self Adhesive (std)	Self Adhesive (std)	Holes provided for mechanical attachment	
	Order Codes [†]	133 – US, EU	056 – GS	165 – GS	

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Our customized and embedded RFID solutions can ensure you know more, about everything, and make critical business decisions faster.

Visit www.omni-id.com/custom-tagging to learn more about the complete line of Omni-ID RFID products.

⁺ Order option codes are listed on the datasheets.

$Fit\ Range-{\rm Small}\ {\rm for\ Integration}, \ High\ Temperature$



		³ OmmID	O _{us}	口幣
		♠ High Temperature	♠ High Temperature	♠ High Temperature
Product Name		Fit 210HT	Fit 210HT Fit 220HT	
Typical Applications		Hand Tool tracking Paint processes in automotive IT assets at point of manufacture Healthcare - sterilization	Small metal tools IT assets Healthcare instruments	Tool tracking including metal hand tools Metal IT assets Autoclaves & high temperature sterilizations
RF Specifications	Frequency Range (MHz)	902-928 (US) 866-868 (EU)	902-928 (US) 866-868 (EU)	902-928 (US) 866-868 (EU)
	Read Range (m) Fixed reader Handheld reader	Up to 2.0 Up to 1.0	Up to 2.2 Up to 1.4	Up to 4.0 Up to 2.0
	Material Compatibility	Optimized for Metal	Metal Optimized for Metal Optim	
	IC Type	Alien Higgs 3	Alien Higgs 3	Alien Higgs 3
Physical and Environmental Specifications	Finish	Red PCB	Ceramic - Painted Black	Ceramic -Painted Black
	Size (mm)	57.1 x 5.95 x 1.3	7.80 × 6.80 × 2.70 (includes IC bump)	13.10 x 7.80 x 3.10 (includes IC bump)
	Weight (g)	1.00	0.60	1.50
	Operating Temperature (°C)¹ Max Temperature Exposure (°C)¹	-20 to +85 -20 to +225	-20 to +85 -20 to +235	-20 to +85 -20 to +235
	Ingress Protection	IP68	IP68	IP68
	Shock and Vibration	MIL STD 810-G	MIL STD 810-G	MIL STD 810-G
	Attachment	Film adhesive (standard) [For placement only in applications exceeding +85°C]	Film adhesive (standard) [For placement only in applications exceeding +85°C]	Film adhesive (standard) [For placement only in applications exceeding +85°C]
	Order Codes [†]	123 - EU, US	155 - EU, US	124 - EU, US

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¹ Excludes adhesive options, consult adhesive datasheets for recommended temperature ratings. Maximum constant exposure for Fit 220 & 400 = 700 hours and 12 hours for Fit 210. † Order option codes are listed on the datasheets.

Flex Range – Flexible to Fit Many Applications



Featured Comparison Guide





Product Name Typical Applications		Flex 600	Flex 1200 Office Equipment Light outdoor use Returnable Transit Items Ideal for Portal setups	
		Office Equipment Light outdoor use Returnable Transit Items Ideal for portal setups		
us	Frequency Range (MHz)	902–928 (US) 866–868 (EU)	902–928 (US) 866–868 (EU)	
Specifications	Read Range (m) Fixed reader Handheld reader	Up to 6.0 ¹ on metal, 3.0m off metal Up to 3.0m on metal, 1.5m off metal	Up to 12.0m on metal, 8.0m off metal Up to 6.0m on metal, 4.0m off metal	
RF Sp	Material Compatibility	Metal & non-metallic substrates	Optimized for Metal	
	ІС Туре	Monza R6-P	Monza R6-P	
	Coverstock	White synthetic label with transparent over laminate	White synthetic label with transparent over laminate	
Su	Size (mm)	55.8 × 20.0 × 2.50	75.0 x 25.0 x 2.50	
catio	Weight (g)	0.85	1.66	
Physical and Environmental Specifications	Operating Temperature (°C)¹	-40 to +85	-40 to +85	
Physionenta	Ingress Protection	IP68	IP68	
rironn	Shock and Vibration	MIL STD 810-G	MIL STD 810-G	
Ē	Attachment	Film adhesive (std)	Film adhesive (std)	
	Order Codes [†]	149 - US, EU	160 - US, EU	



1 Excludes adhesive options, consult adhesive datasheets for recommended temperature ratings. Maximum constant exposure for Fit 220 & 400 = 700 hours and 12 hours for Fit 210. *Order option codes are listed on the datasheets.

$Exo\ Range-{\tt Encased\ and\ Heavy-Duty}$



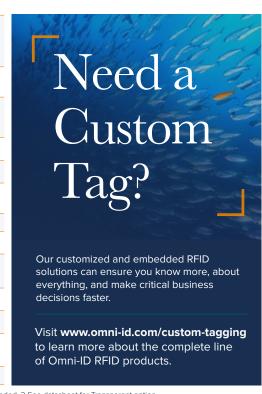
		Same				
		♠ High Temperature	→ Global			
Product N	Name	Exo 400HT	Exo 600	Exo 750	Exo 800	Exo 800P Rigid
Typical A	pplications	Healthcare sterilization processes Manufacturing Automotive. post paint processes	Logistics & Postal Industries. Automotive. Retail & warehousing	Automotive Supply Chain. Logistics and Postal. Manufacturing tote tracking	Manufacturing tote tracking. Logistics and Postal. Retail supply chain	Plastic RTIs and containers Plastic pallets Non-metallic industrial assets
suc	Frequency Range (MHz)	902-928 (US) 866-868 (EU)	860–930 (GS)	860-930 (GS)	860-930 (GS)	860-930 (GS)
Specifications	Read Range (m) Fixed reader Handheld reader	Up to 4.0 Up to 2.0	Up to 6.0 Up to 3.0	Up to 11.0 (US), 7.0 (EU) Up to 5.0 (US), 3.5 (EU)	Up to 8.0 Up to 4.0	Up to 8.0
R S	Material Compatibility	Optimized for Metal	Optimized for Metal	Optimized for Metal	Optimized for Metal	Optimized for Plastic
	IC Type	Alien Higgs 3	Impinj Monza 4QT	Impinj Monza 4QT	Impinj Monza 4QT	Alien Higgs 3
10	Encasement ²	Thermoplastic	ABS Rigid Plastic	ABS Rigid Plastic	ABS Rigid Plastic	ABS Rigid Plastic
i i i i i i i i i i i i i i i i i i i	Size (mm)	37.0 × 14.0 × 7.5	80.0 × 15.0 × 12.5	51.0 × 48.0 × 12.6	110 × 25.0 × 12.9	105 × 36.0 × 3.5
nd cifica	Weight (g)	5.7	12.5	25.6	26.8	11.6
al ar Spe	Operation Temperature (°C)	-20 to +85	-40 to +85	-40 to +85	-40 to +85	-20 to +85
Physical and nental Speci	Max Temperature Exposure (°C)	-20 to +235	-40 to +85	-40 to +85	-40 to +85	-20 to +85
Physical and Environmental Specifications	Ingress Protection	IP68	IP68	IP68	IP68	IP68
Envir	Shock and Vibration	MIL STD 810-G	MIL STD 810-G	MIL STD 810-G	MIL STD 810-G	MIL STD 810-G
	Attachment	Mechanical (std) 2 x Ø3mm holes	Mechanical (std.) Premium foam adhesive (option)	Mechanical (std.) Premium foam adhesive (option)	Mechanical (std.) Premium foam adhesive (option)	Rivet/Screw(not included) Premium foam adhesive (option)
	Order Codes [†]	144 – EU, US	061 – GS	078 – GS	077 – GS	104 – GS

[†] Order Option Codes are listed on the datasheets. 1 Prolonged exposure to temperatures over 70°C may result in minor dimensional change to the case, attachment by rivets instead of adhesive is recommended. 2 See datasheet for Transparent option

Exo Range – Encased and Heavy-Duty



			6	2	
		→ Global	→ Global	→ Global	
Product Name		Exo 1000 Exo 2000		Exo 3000	
Typical Applications		Manufacturing tote tracking Logistics and Postal Retail supply chain	Container tracking for yard management. Cargo tracking. Defense asset management	Cargo and container tracking. Heavy equipment tracking and maintenance. Location identification in lay down zones	
	Frequency Range (MHz)	860-930 (GS)	860-930 (GS)	860-930 (GS)	
Specifications	ead Range (m) ixed reader landheld reader Up to 8.0		Up to 20.0 Up to 9.0	Up to 33.0 Up to 20.0	
pecifi	Material Compatibility	Optimized for Metal	Optimized for Metal	Optimized for Metal	
R R	ІС Туре	Impinj Monza 4QT	Impinj Monza 4QT	Impinj Monza 4QT	
	Encasement	ABS Rigid Plastic	PC ABS blend	PC ABS blend	
	Size (mm)	110 × 25.0 × 12.7	139 × 53.0 × 14.9	174 × 70.0 × 17.7	
tions	Weight (g)	18.3	64.0	110	
fica	Operation Temperature (°C)	-40 to +851	-40 to +85	-40 to +85	
l and	Max Temperature Exposure (°C)	-40 to +85 ¹	-40 to +100	-40 to +100	
Physical and nental Specif	Ingress Protection	IP68	IP68	IP68	
Physical and Environmental Specifications	Shock and Vibration	MIL STD 810-G	MIL STD 810-G	MIL STD 810-G	
Envir	Attachment	Mechanical (std) 2 x Ø3mm holes	Manual (std) Premium Foam adhesive (option)	Mechanical (standard) Premium foam adhesive (option)	
	Order Codes [†]	144 – EU, US	152 – GS	153 – GS	



[†] Order Option Codes are listed on the datasheets. 1 Prolonged exposure to temperatures over 70°C may result in minor dimensional change to the case, attachment by rivets instead of adhesive is recommended. 2 See datasheet for Transparent option



Sense Range – Intelligent, Powerful IoT Devices

LoRaWAN

NI/A

LoRaWAN



RFID E O . Sense^{IoT} Condition Sense^{IoT} Condition SenseIoT Asset XL **Product Name** SenseIoT Asset Sense^{IoT} Fit 400 (with Alert Button) (with Laser Range Finder) Facilities management, Production line Facilities management, Production line Efficient operation, Equipment monitoring Hospitals, Manufacturing facilities, Warehouse Cold chain condition monitoring, Container material flow, Consumable replenishment, material flow, Consumable replenishment, in-house or in transit, Data Centers and management, Facilities management, Room utilisation, State change notification, Room utilisation, State change notification, management, Cold chain condition metal IT assets - both in terms of tracking Typical Applications monitoring, Container management, Facilities Ports construction & mining, Field operations, Space/asset utilisation, Field operations, Ports Space/asset utilisation, Field operations, Ports and temperature monitoring, Embedding management, Ports construction & mining, Asset management, Worker accountability, construction & mining, Emergency detection, construction & mining, Emergency detection, the tag into metal components, Monitoring Asset management Fleet monitoring, Yard management Asset management, Worker accountability, Asset management, Worker accountability, mechanical plants Fleet monitoring, Yard management Fleet monitoring, Yard management Bluetooth 4.2 (2.45GHz) +8dBm to -15dBm LoRaWAN LoRaWAN LoRaWAN Radio Protocol EPC Class 1 Gen2v2 NFC (Beacon configured via NFC) Frequency Range LoRa N/A 868MHz (EU) | 915MHz (US) 868MHz (EU) | 915MHz (US) 868MHz (EU) | 915MHz (US) 866-868 (EU) | 902-928 (US) Sealed Prismatic battery, non-replaceable Sealed Prismatic battery, non-replaceable Sealed Prismatic battery, non-replaceable Sealed Prismatic battery, non-replaceable N/A **Battery Type Battery Capacity** 1.5Ah 4.8Ah 3.85Ah 3.85Ah N/A **Battery Life** 5 years, 2,000 movements 5 years+, 25,000 activations 5 years, 5% motion, 10 second beacon rate 5 years+ at 15 Minute range reading interval N/A Range 3-4 km urban - can be up to 15 km line Range 3-4 km urban — can be up to 15 km line Range 3-4 km urban — can be up to 15 km line Fixed reader: Up to 4 m (13.1 ft)1 Read Range 200 m+ depending on reading device of sight of sight of sight Handheld reader: Up to 2 m (6.6 ft)1 **Default Beacon Rate** Configurable from 1-10 seconds Configurable from 1-254 hours Configurable from 1-254 hours Configurable from 1-254 hours N/A Configurable from 0-10 seconds Configurable from 1-254 minutes Configurable from 1-254 minutes Configurable from 1-254 minutes Alarm Beacon Rate N/A (where 0 is off) (where 0 is off) (where 0 is off) (where 0 is off) Laser Range Finder Push Button (Alert) GPS (Location) Optional: Temperature, Ontional: Temperature Sensors Accelerometer, Temperature Accelerometer (Movement) AccelerometerOptional: Temperature. Temperature AccelerometerAccelerometer (Movement) Temperature (Measurement) AccelerometerAccelerometer (Movement) Temperature (Measurement) Temperature (Measurement) Yes No **LED Indicator** Yes Yes Yes

Temperature Sensor Range −20°C to +60°C with an accuracy of +/−2°C

Continues overleaf

-20°C to +60°C with an accuracy of +/-2°C

Bluetooth

LoRaWAN

^{1.} Excludes adhesive options, consult adhesive datasheet for recommended temperature ratings.



Sense Range – Intelligent, Powerful IoT Devices



Bluetooth

LoRaW4N



Sense^{IoT} Condition

(with Alert Button)

LoRaWAN



(with Laser Range Finder)

Sense^{IoT} Condition

LoRaWAN



Sense^{IoT} Fit 400

N/A

N/A

Product Name

Configurable

Construction

Size (mm)

Weight (g)

Attachment

IP Rating

Warranty

IC Type (chip)

Certifications

Operating Temperature

High-temperature Alarm

Shock and Vibration

Max Temperature Exposure¹

Supported Profiles

SenseIoT Asset

Tag Type (GATT Profile)

Open, iBeacon, Eddystone UUID

TPE (Thermoplastic elastomer)

Overmolded durable, shock resistant

Mechanical (std) Film Adhesive (optional)

CC, FCC, ROHS, WEEE, NFC, BLE

Alarm Beacon Rate

Temp. Threshold

Acc. Threshold

95.1 × 34.2 × 21

-20°C to +60°C

MIL-STD-810-F

59

N/A

N/A

IP68

N/A

1 year

Default Beacon Rate

Sense^{IoT} Asset XL

Alarm Beacon Rate Default Beacon Rate Temp. Threshold Acc. Threshold *GNSS Min. Lock Time *GNSS Max. Lock Time *GNSS DOP Threshold

TPE (Thermoplastic elastomer)

113.4 × 58.3 x 24.3

-20°C to +60°C

MIL-STD-810-F

134

N/A

N/A

IP68

N/A

1 year

Overmolded durable, shock resistant

Mechanical (std) Film Adhesive (optional)

N/A

(Minutes) Optional Temp

Sensor Period

80.3 × 60.3 × 21.3

Film Adhesive

-20°C to +60°C

MIL-STD-810-F

CC. FCC. ROHS. WEEE, NFC, LoRa

77

N/A

N/A

IP68

N/A

1 year

Alarm Beacon Rate

Default Beacon Rate

2-part durable PC/ABS Case

Sensor Period (Minutes)

102.5 × 60.3 × 20.1

80

N/A

N/A

IP68

N/A

1 year

MIL-STD-810-F

CC. FCC. ROHS. WEEE, NFC. LoRa

Alarm Beacon Rate

Default Beacon Rate

N/A

2-part durable PC/ABS Case Painted black. Optimized for metal

13.1 x 8.05 x3.1 including IC bump Tolerance +/-0.5

1.4 Film adhesive (included) for placement

Mechanical (std) Film Adhesive (optional) only in applications exceeding +85°C2 -40°C to +85°C1

> Up to +125°C1 220°C short term 168 hrs 150°C long term 700 hrs

Magnus S3: M3D / M3E

MIL-STD-810-G Magnus S3: M3D / M3E

> 1 vear CE, ROHS, ATEX Certified (Optional) C1D1/D2 Certified (optional)

1. Excludes adhesive options, consult adhesive datasheet for recommended temperature ratings. 2. The product has been designed for optimal RF performance when used with 130 micron +/-20% adhesive under the tag.

CC. FCC. ROHS. WEEE, NFC, LoRa