

Demystifying RFID sales: when to sell short-range, standard-range and long-range RFID

How to select the right RFID solution(s) for your sales opportunities:

Determine the RFID read range required and the application. Then use the following chart to determine which option(s) will best meet your customer's needs.



Zebra RFID Portfolio	Short-Range UHF RFID							Standard-Range RFID				Long-Range RFID	
	Handheld mobile computer	Handheld mobile computer	Handheld mobile computer	Handheld mobile computer	Wearable computer	Enterprise tablet	Corded imager with RFID	RFID handheld mobile computer	Handheld mobile computer + standard RFID sled	Handheld mobile computer + ultra-rugged RFID sled	RFID handheld mobile computer	RFID handheld mobile computer	Handheld mobile computer + ultra-rugged RFID sled
													
Overview	EM45 RFID Enable short-range UHF RFID capabilities with built-in reader Take it anywhere with 5G	TC53e-RFID Enable short-range UHF RFID capabilities with built-in reader Enable multiple RFID capabilities: add standard range or long range RFID via a sled	TC501 Enable short-range UHF RFID capabilities with built-in reader Rugged, high-performance, AI-empowered mobile computer	TC701 Enable short-range UHF RFID capabilities with built-in reader Ultra-rugged, high-performance, AI-empowered mobile computer	WS50 RFID Dedicated form factor—world's smallest all-in-one Android enterprise wearable computer	ET401 Enable short-range UHF RFID capabilities with built-in reader Smart, AI-empowered rugged tablets available in 8-inch and 10-inch models	DS9808R hands-free scanner Corded hybrid handheld and hands-free barcode scanning and short-range UHF RFID Capture RFID-tagged merchandise at the Point of Sale (POS), as well as commissioning RFID tags on returned goods and new items for processing	MC3330xR UHF RFID Reader Ideal for jobs that include activities that require a high volume of RFID tag capture Integrated circular polarized antenna delivers extraordinary reliability no matter the orientation of the tag	RFD40 UHF RFID Sleds (Standard, Premium and Premium+) Provides the flexibility to use a standalone TC Series mobile computer and insert into the sled when RFID is needed TC53e-RFID with integrated short range RFID: add standard range RFID via RFD40 sled All TC Series models (no integrated RFID), including: TC2x, TC5x, TC7x, HC2x, HC5x, EC5x Third-party smartphones and other Bluetooth devices*	RFD9030 Standard-Range Ultra-Rugged UHF RFID Sled Provides the flexibility to use the TC device standalone and insert into the sled when RFID is needed TC53e-RFID with integrated short range RFID: add standard range RFID via the RFD40 sled All TC Series models (no integrated RFID): TC2x, TC5x, TC7x, HC2x, HC5x Third-party smartphones and other Bluetooth devices*	TC22R Integrated Handheld RFID Reader All-touch, all-in-one RFID reader that's easy to use, configure, and manage Lightweight reader enables workers to continue cycle counts with less fatigue Wi-Fi 6, Bluetooth* 5.2, and NFC reading capabilities built in Fully integrated Android-based solution that can be supported by mainstream MDMs	MC3390xR UHF RFID Reader Dedicated form factor that is ideal for jobs that include activities that require a high volume of RFID tag capture Integrated long-range antenna quickly reads RFID tags, resulting in faster and more accurate data collection	RFD9090 Ultra-Rugged UHF RFID Sleds Provides the flexibility to use the TC device standalone and insert into the sled when RFID is needed TC53e-RFID with integrated short range RFID: add long range RFID via RFD90 sled All TC Series models (no integrated RFID): TC2x, TC5x, TC7x, HC2x, HC5x Third-party smartphones and other Bluetooth devices*
Solution Type	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated, requires separate host	Integrated	Snap-on sled	Snap-on sled	Integrated	Integrated	Snap-on sled
Read Range	Less than 6 ft. (1.83 m)	Less than 6 ft. (1.83 m)	Up to 6.5 ft. (2 m)	Up to 6.5 ft. (2 m)	Less than 6 ft. (1.83 m)	4 ft. (1.2 m)	~18 inches (~45.7 cm)	1 ft. to 20 ft. (0.3 m to 6.1 m)	1 ft. to 20 ft. (0.3 m to 6.1 m)	1 ft. to 22 ft. (0.3 m to 6.7 m)	1 ft. to 40 ft. (0.3 m to 12.2 m)	1 ft. to 75 ft. (0.3 m to 22.86 m)	1 ft. to 75 ft. (0.3 m to 22.86 m)
Antenna Type	Linear omnidirectional	Linear omnidirectional	Linear omnidirectional	Linear omnidirectional	Linear omnidirectional	Linear omnidirectional	Linear omnidirectional	Circular polarized	Circular directional	Circular directional	Linear polarized	Linear polarized	Linear directional
Tag Reads per Second	20	20	200	200	40	>90	20	900+	1,300+	1,300+	1,300+	900+	1,300+
Vertical Markets and Use Cases	Retail - Item locating (short range/ low density/low quantity) - Mobile POS checkout/line-busting - Order fulfillment/BOPIS/BOPAC - Inventory cycle counting Hospitality - Event ticketing Field Service/Technicians - Asset management - Parts inventory Warehousing - Pick-pack stations - Delivery verifications Healthcare - Trunk stock - Specimen identification - Patient transportation Transportation & Logistics - Gate baggage handling - Gate side bag check - In-flight food and beverage inventory - DSD delivery	Retail - Item locating (short range/ low density/low quantity) - Mobile POS checkout/line-busting - Order fulfillment/BOPIS/BOPAC - Inventory cycle counting Hospitality - Event ticketing Field Service/Technicians - Asset management - Parts inventory Warehousing - Pick-pack stations Healthcare - Trunk stock - Specimen identification	Retail - Item locating (short range/ low density/low quantity) - Shopping cart compliance - Inventory cycle counting - Returns - Pricing/markdowns Field Service/Technicians - Asset management - Parts inventory Postal/Courier Drivers - Delivery verification - Validate truck loading - Asset and container tracking - Returnable Transport Item (RTI) tracking - Package finding	Transportation & Logistics/ Parcel/Delivery/Post - Delivery verification - Validate truck loading - Asset and container tracking - Returnable Transport Item (RTI) tracking - Package finding Field Service/Technicians - Asset management - Parts inventory Retail - Item locating (short range/ low density/low quantity) - Backroom inventory management - Pricing/markdowns Warehousing/Manufacturing - Package sorting - Loading/unloading - Parts tracking - Materials validation - Finished good verification	Retail - Item picking/BOPIS/BOPAC - Pricing/markdowns - Back of store operations - Task management Warehousing/Distribution - Pick-pack stations - Package sorting - Receiving/put-away - Loading Transportation & Logistics - Sorting - Loading/unloading - Package handling - Custom cages Manufacturing - Pallet/container management - Parts tracking - Finished good verification	Retail - POS checkout - Commissioning tags - Coupons and loyalty Warehousing/Distribution - Pick-pack stations - Package sorting - Receiving/put-away - Loading Transportation & Logistics - Sorting - Loading/unloading - Package handling - Custom cages Manufacturing - Pallet/container management - Parts tracking - Finished good verification	Retail - POS checkout - Commissioning tags - Coupons and loyalty Warehousing/Distribution - Pick-pack stations - Package sorting - Receiving/put-away - Loading Transportation & Logistics - Sorting - Loading/unloading - Package handling - Custom cages Manufacturing - Pallet/container management - Parts tracking - Finished good verification	Retail/Back of store - Item locating - Inventory cycle counting - Omnichannel order fulfillment - Replenishment - Receiving/shrink control - Back-of-store management Data Center/offices - Asset management and tracking Healthcare - Inventory cycle counting - Critical asset management - Item finding - Parts tracking - Trunk stock demo/sample inventory (medical device and pharma manufacturers)	Retail - Item locating - Inventory cycle counting - Planogram compliance - Returns - Inventory/warehouse/ back-of-store management - BOPIS/BOPAC Hospitality - Event ticketing - Check-in - Loyalty cards - Food safety/traceability - Inventory management - Field service Healthcare - Tracking: specimen/patient/ assets/staff - Medication administration - Pharmacy management and tracking	T&L - Baggage tracking - Inventory cycle counting - Item locating - Cold chain - Returnable Transport Object (RTO) tracking Manufacturing - Work in Progress (WIP) tracking - Raw materials inventory - Pipeline/utility tracking - Item locating - Returnable Transport Object (RTO) tracking Government - Kitting - Asset tracking - Item locating - Chain of custody - Personnel access control	Retail - Item locating - Inventory cycle counting - Mobile POS/line-busting - BOPIS/BOPAC Hospitality - Event ticketing - Mobile POS Light Manufacturing - Product and component tracking - Work in Process (WIP) Government - Asset tracking - Document management Transportation and Logistics - Inventory cycle counting - Loading verification - Inbound/outbound verification	Supply Chain/T&L - Item tracking/locating - Cross-docking Warehousing - Inventory cycle counting - Replenishment - Receiving/shrink control - Item tracking/locationing - Omnichannel order fulfillment Manufacturing - Work in Process (WIP) - Parts and finished goods inventory	T&L - Baggage tracking - Inventory cycle counting - Item locating - Cold chain - Returnable Transport Object (RTO) tracking Manufacturing - Work in Progress (WIP) tracking - Raw materials inventory - Pipeline/utility tracking - Item locating - Returnable Transport Object (RTO) tracking Government - Kitting - Asset tracking - Item locating - Chain of custody - Personnel access control

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