




















Device Image	Manufacturer	Modell	Processor and Antenna Ports	Dimension s (L x B x H) in cm	Applications	Reader Receiver Sensitivity Range Read Range
Gate Reader <ul style="list-style-type: none"> - Have higher power output than other kind of readers - Medium to high performance - Generally, have multiple external ports at their disposal - In interaction with multiplexers have the ability to connect to up to 32 RFID antennas - Sensitivity ranges from -70 to -90 dBm 						
	Alien	ALR_F800	ARM9 677MHz processor, Linux, 1GByte DDR3 RAM, 2 GBytes Flash 4 reverse polarity TNC monostatic ports; circular or linear polarization; near and far field compatible	20.2 x 19.1 x 2.8 cm	Installation Operations Multiple Reader visualization and Management	Sensitivity Range measured -76 dBm to -87 dBm
	Alien	ALR_9680	Four with RTNC connector	18.41 x 24.13 x 3.17 cm	Supply Chain Manufacturing and Asset Management Applications	
	Alien	ALR_9900	XScale processor, 4 reverse polarity TNC monostatic	20.3 x 17.8 x 4.1 cm	Supply Chain Manufacturing and Asset Management Applications	Sensitivity Range measured -77 dBm to -79 dBm





			ports; circular or linear polarization; near and far field compatible			
	Impinj	Speedway R420	4x Antenna Ports	19 x 17.5 x 3 cm	Retail Solar plant monitoring Warehouse Manufacturing	Sensitivity Range measured -70 dBm to -73 dBm Datasheet -84dBm Maximum Read rate 1100 tag/s
	Impinj	Speedway R220	2x Antenna Ports	19 x 17.5 x 3 cm	Retail Solar plant monitoring Warehouse Manufacturing	Sensitivity Range Datasheet -84 dBm Maximum Read rate 200 tag/s
	Impinj	Speedway R120	1x Antenna Ports	19 x 17.5 x 3 cm	Retail Solar plant monitoring Warehouse Manufacturing	Sensitivity Range Datasheet -84 dBm Maximum Read rate 200 tag/s
	Impinj	R700	Dual-Core 1 GHz ARM processor 4x Antenna Ports	21.5 x 18.7 x 3.0 cm	Retail Solar plant monitoring Warehouse Manufacturing	Sensitivity Range Datasheet -92 dBm Read rate up to 1100 per second
	Impinj	xArray Gateway		46.7 x 46.7 x 7.5 cm	Identify & Locate RFID Tagged Items	Sensitivity Range Datasheet -82 dBm Read Range -

						
	Kathrein	RRU 4560	ARMv7-A based processor with 600 MHz 4 antenna ports	30 x 30 x 7.1 cm	Logistics Industrial Automation Vehicle Identification Smart City Applications	Sensitivity Range measured -77 dBm to -80 dBm
	Kathrein	ARU 3560	ARMv7-A based processor with 600 MHz 4 antenna ports	30 x 30 x 7.1 cm	Logistics Industrial Automation Vehicle Identification	Sensitivity Range measured -82 dBm to -83 dBm
	Kathrein	RRU 4500	ARMv7-A based processor, 2 cores @ 800 MHz 4 antenna ports	30 x 30 x 7.1 cm	Logistics Industrial Automation Vehicle Identification	Sensitivity Range Datasheet -80 dBm
	Kathrein	RRU 1400	ARMv7-A based processor with 600 MHz 4 antenna ports	16 x 16 x 26 cm	Logistics Industrial Automation Access Control eKanban Applications	Sensitivity Range Datasheet -70 dBm
	Nordic ID	AR62	1.2GHz 64-bit Quad-Core Cortex-A53 processor	21 x 12 x 3.1 cm	Technology, product and integration training Technology and project consultation Project management services	Sensitivity Range Datasheet -81dBm Reader speed up to 1000 tags/s

	Nordic ID	AR82	1.2GHz 64-bit Quad-Core Cortex-A53 processor Radiation beams: 13 (26 radiation states due to dual polarization) Polarization: Dual-Linear 3dB Beam width: 45 ° Beam steering: ± 40	40.5 x 40.5 x 6.8 cm	Technology, product and integration training Technology and project consultation Project Management	Sensitivity Range Datasheet -81dBm Reader speed up to 1000 tags/s
	Rcaenrfid	Proton Model R4320P	ARM9 @ 400 MHz on Atmel AT91SAM9G25 4 TNC Reverse Polarity	106x 131 x 50	RAIN RFID portals for logistic Industrial automation reading points RAIN RFID tunnels Access control reading points	Sensitivity Range Datasheet -84dBm

	Rcaenfid	Quattro Model R4321P	ARM9 @ 400MHz on Atmel AT91SAM9G25 4 TNC Reverse Polarity	140 x 210 x 27	RAIN RFID portals for logistics Industrial automation reading Points Smart shelves and smart display	
	Zebra	FX9600	Texas Instruments AM3505 (600 MHz) FX9600-4: 4 monostatic ports; (Reverse Polarity TNC) FX9600-8: 8 monostatic ports; (Reverse Polarity TNC)	27.3 x 18.4 x 5.0 cm	Team-level tagging Asset tracking Pickup and delivery confirmation	Sensitivity Range measured -74 dBm to -76 dBm Datasheet -86 dBm
	Zebra	FX7500	FX 7500-2: 2 mono-static ports (Reverse Polarity TNC) FX 7500-4: 4 mono-static ports (Reverse Polarity TNC)	19.56 x 14.9 x 4.32 cm	Warehouse Retail Store distribution Center	Sensitivity Range Datasheet -82 dBm Reader performance up to 1200 tags/sec





	Zebra	ST5500	Texas Instruments AM3505 (600 MHz) FX 7500-2: 2 mono-static ports (Reverse Polarity TNC) FX 7500-4: 4 mono-static ports (Reverse Polarity TNC)	19.56 x 14.99 x 4.32 cm	Warehouse Retail Store distribution Center	Sensitivity Range Datasheet -82 dBm
	Zebra	FX9500	Marvell 88AP270 (624MHz) FX9500-4: 4 monostatic or 2 bistatic ports (Reverse Polarity TNC) FX9500-8: 8 monostatic or 4 bistatic ports	27.3 x 18.4 x 5 cm	Warehousing Management Manufacturing Industries	Sensitivity Range Datasheet -84,5 dBm
<p>Specialized Reader</p> <ul style="list-style-type: none"> - Usually lower output power for special application - Intended for smaller reading zones with low traffic of tagged items - Have Integrated Antennas - Smaller form factors designed for indoor applications - Sensitivity ranges from -50 to -83 dBm 						
	Feig	MRU102	3x SMA socket (50 Ω), 1x internal antenna	14.5 x 8.7 x 2.7 cm	Unused self-service stations / kiosks Detection of containers in the refill control	Sensitivity Range measured -49 dBm to -50 dBm Read Range up to 50 cm

	Hermos	Compact Reader	RS232 and Ethernet interface 6 antenna ports 4 DIP switches and 3 status LEDs I/O module with inputs and outputs per antenna port	13 x 12.4 x 4.5 cm		Sensitivity Range measured -54 dBm to -58 dBm Reader Range HF midrange 13.56MHz
	Hermos	Display Reader	3.5" LCD display with touch 6 status LEDs and a buzzer PoE Ethernet data interface Integrated antenna	12 x 12 x 4.2 cm		Sensitivity Range measured -44 dBm to -54 dBm
	Nordic ID	EXA31	Nordic ID NUR-05WL2 reader module Circular polarization	7.7 x 4.8 x 2.4 cm	Project Management Technology and project consultation	Sensitivity Range measured -49 dBm to -57 dBm Read Range up to 2 m
	Nordic ID	EXA51	Software controlled antenna modes: linear (horizontal & vertical)	196 x 83 x 21	Retail Logistics	Sensitivity Range Datasheet -77dBm Read Range up to 10m Reader performance up to 1000 tags/sec

	SICK	RFU610e	RFID read/write device with integrated antenna Polarization circular	9.2 x 8.0 x 3.8 cm		Sensitivity Range measured -58 dBm to -59 dBm Read Range up to 0.5 m
	SICK	RFU630-04101	RFID read/write device without integrated antenna 4 Extern Antennas	23.9 x 19.7 x 4 cm		Sensitivity Range measured -72 dBm to -79 dBm Read Range up to 10 m
	SICK	RFU630-04100	RFID read/write device without integrated antenna 4 Extern Antennas	23.9 x 19.7 x 4 cm		Sensitivity Range measured -79 dBm to -82 dBm Read Range up to 10 m
	SICK	RFU620-10500	RFID read/write device with integrated antenna Polarization circular	13.7 x 13.1 x 5.6 cm		Sensitivity Range measured -52 dBm to -65 dBm Read Range up to 2 m
	SICK	RFU650-10100	RFID read/write device with integrated antenna Polarization circular	40 x 25.2 x 70 cm		Sensitivity Range measured -74 dBm to -83 dBm Read Range up to 10 m



Handheld Reader

- Antennas are integrated inside the reader
- High mobility and flexibility while reading RFID tags
- High user configuration and addition of features
- Rugged designs for industrial use
- Models with onboard computers or connection to smart devices via Bluetooth
- Sensitivity ranges from -55 to 84dBm

	ACD	M2Smart	Multicore CPU, 4 x ARM Cortex-A53, 1 x Cortex-M4	17.4 x 8.2 x 2.8 cm	Industry Retail trade Warehouse Administration Incoming/outcoming Goods	Sensitivity Range measured -58 dBm to -70 dBm
	ACD	M2Smart_N	NXP® i.MX8M Mini, 4x Cortex A53 (4x 1,8 GHz) und 1x Cortex M4 (1x 400 MHz)	17.4 x 8.2 x 2.8 cm	Industry Retail trade Warehouse Administration Incoming/outcoming Goods	Sensitivity Range measured -54 dBm to -64 dBm
	Chainway	C71	Cortex-A53 2.5/2.3 GHz Octa-core	16.4 x 7.8 x 1.7 cm	Logistics Warehousing Retail	Sensitivity Range measured -60 dBm to -65 dBm Read Range 2 – 4 m
	Feig	HyWear		6 x 5 x 2.3 cm	Manufacturing Distribution Parcel services	Sensitivity Range measured -60 dBm to -55 dBm

	ID Tronic	C4	Quad A53 1.3 GHz quad-core Circular antenna 2 dBi	17 × 8.5 × 2.3 cm	Access Control Asset Tracking Maintenance	Sensitivity Range measured -35 dBm to -63 dBm Read Range up to 1.5 m
	Nordic ID	Merlin	ARM11 532 MHz Horizontal linear polarized	23 x 9 x 4.7 cm	Technology, product and integration training Technology and project consultation Project management services	Sensitivity Range measured -31 dBm to -76 dBm Read Range up to 2.5 m
	Nordic ID	Morphic	ARM11™ 532 MHz	14.7 x 5.4 x 3.5 cm	Logistics Retail Warehouse	Sensitivity Range measured -56 dBm to -65 dBm Read Range up to 2.5 m
	Nordic ID	HH53	Quad-Core ARM Cortex-A9 1GHz	196 x 83 x 21	Logistics Retail Warehouse	Sensitivity Range Datasheet -77dBm Read Range up to 1m Maximum Read rate 1000 tag/s
	Nordic ID	HH83	CPU: Octa-Core ARM Cortex-A53 1.8 GHz	17.7 x 7.8 x 3.5 cm	Logistics Retail Warehouse	Sensitivity Range measured -71 dBm to -82 dBm Datasheet -80 dBm Read Range up to 15 m

	Nordic ID	HH85	Octa-Core ARM Cortex-A53 1.8GHz Software controllable antenna polarizations (vertical, horizontal or vertical/horizontal switching)	214 x 87 x 135	Logistics Retail Warehouse	Sensitivity Range Datasheet -80dBm Read Range up to 15m Maximum Read rate 1000 tag/s
	Silion	SIR3522	ARM Cortex-M4 Built in flexile Antenna	165 x 120 x 60		Read Range 5cm up to 20cm Maximum Read rate 200tags/s
	Technology Solutions	2128P Bluetooth Uhf RFID reader	TSL custom module with embedded Impinj R2000 Right Hand Circularly Polarized with optional 2D scanner	158 x98 x 170		Read Range up to 9 m
	Zebra	MC9190Z	Marvell PXA320 processor at 806 MHz Antenna Internal	27.3 x 11.9 x 19.5 cm	Team-level tagging Asset tracking Pickup and delivery confirmation	Sensitivity Range measured -70 dBm to -81 dBm Read Range up to 9.14 m

			Integrated, linearly polarized			Write Range up to 1.22 m
	Zebra	MC3390r	Qualcomm 8056 1,8-GHz- Hexa-Core, 64 Bit, with Performance optimization Integrated, linearly polarized	6.45 x 7.8 x 10.67 cm	Team-level tagging Asset tracking Pickup and delivery confirmation	Sensitivity Range measured -77 dBm to -85 dBm Read Range up to 18 m
	Zebra	RFD40		15.1 x 8.4 x 16.65	Retail Hospitality Healthcare	Read Range up to 6+m Maximum Read rate 1300+tags/sec