










# RAIN RFID technology: Your way to a successful future!

KATHREIN Solutions passive UHF RFID reader hardware includes stationary readers and antennas with a read range from a few centimetres up to several meters. With those high end devices logistics, industrial automation, healthcare and vehicle identification applications can be covered.

KATHREIN Solutions reader portfolio							
Type	RRU 1400	ARU 2400	ARU 3500 <sup>1)</sup>	RRU 4500 <sup>1)</sup>	ARU 7700	RRU 7700	InLane Reader
Specifications	RAIN RFID / ISO 18000-63 and GS1 EPCglobal Gen2v2/Gen2v3 compliant						
Air interface protocol	RAIN RFID / ISO 18000-63 and GS1 EPCglobal Gen2v2/Gen2v3 compliant						
Integrated antenna	–	1	1	–	1	–	1 with 4 orthogonal beams
Ports for ext. antennas	4	3	3	4	3	4	–
Read zone with ©KRAI <sup>2)</sup>	32	25	25	32	–	32	4
Transmit power [max. dBm]	+30	+30	+33	+33	+33	+33	+33
Sensitivity [dBm]	typ. –80	typ. –70	typ. –93	typ. –93	typ. –80	typ. –80	typ. –80
Tag per-second	500	500	1.100	1.100	1.000	1.000	1.000
Processor speed	ARMv7-A based processor with 600 MHz		i.MX 8 processor with co-processor, 2 cores @ 800 MHz		ARMv7-A based processor, 2 cores @ 800 MHz		
Flash memory eMMC [Mbyte]	4.000	4.000	8.000	8.000	8.000	8.000	8.000
RAM DDR2 [Mbyte]	128	128	1.000	1.000	1.000	1.000	1.000
Ethernet ports	1	1	1	1	2	2	–
GPIO - input/output	2/2	2/2	4/4	4/4	4/4	4/4	–/–
LED visualization	4	4	8	8	4 + 8	4 + 8	–
Degree of protection	IP40	IP40	IP68 <sup>3)</sup>	IP68 <sup>3)</sup>	IP67 <sup>3)</sup>	IP67 <sup>3)</sup>	IP67
Wireless interfaces	–	–	WiFi, BLE, 5G	WiFi, BLE, 5G	–	–	–
Localization	–	–	GNSS	GNSS	–	–	–
Key characteristics							
RFID performance							
Network & security							
Connectivity							
Use case							
Manufacturing and Automotive	✓	✓	✓	✓	✓	✓	
Logistics	✓	✓	✓	✓	✓	✓	
Track & Trace	✓	✓		✓		✓	
Intelligent Transportation Systems			✓	✓	✓	✓	✓
Healthcare	✓	✓		✓		✓	

<sup>1)</sup> Gen4 to Gen3 functionally identical  
<sup>2)</sup> With the suitable ©KRAI KATHREIN antennas, the readers with ©KRAI function allow polarization switching and SSMH cascading  
<sup>3)</sup> if all connections are made with a KATHREIN cable or have KATHREIN protective caps