



keonn

Modular RFID
Components

AdvanSplitter-4™ RFID UHF power splitter





Benefits:

- Higher speed to scan an area
- Combines different Keonn antennas, creating new antennas with longer read range and narrower beamwidth
- Very fast and easy connection
- Very low insertion loss
- Capable of supporting unbalanced loads

Applications:

- Smart shelves
- Any RFID application that requires high speed scan
- Any RFID application that requires long read ranges
- Any RFID application that requires narrow beamwidths

Product overview

AdvanSplitter-4 is a high performance four port power splitter designed for RFID UHF applications.

AdvanSplitter-4 is ideal for systems where reading speed is critical and tag location is not determinant. AdvanSplitter-4 can feed up to 4 antennas simultaneously in order to scan an area much faster than using multiplexers.

AdvanSplitter-4 can also combine different Keonn antennas in new ways, creating new antennas with longer read range and narrower beamwidth.

AdvanSplitter-4 can therefore be used to create new antennas adapted to the needs of each RFID application. This flexibility allows to find the optimal antenna solution for any RFID project.

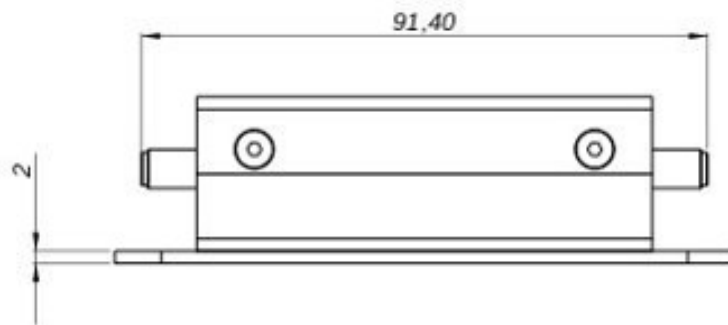
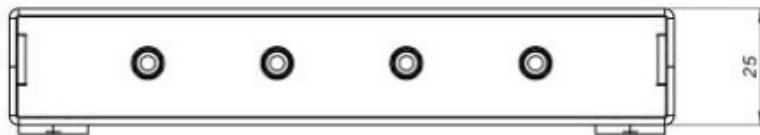
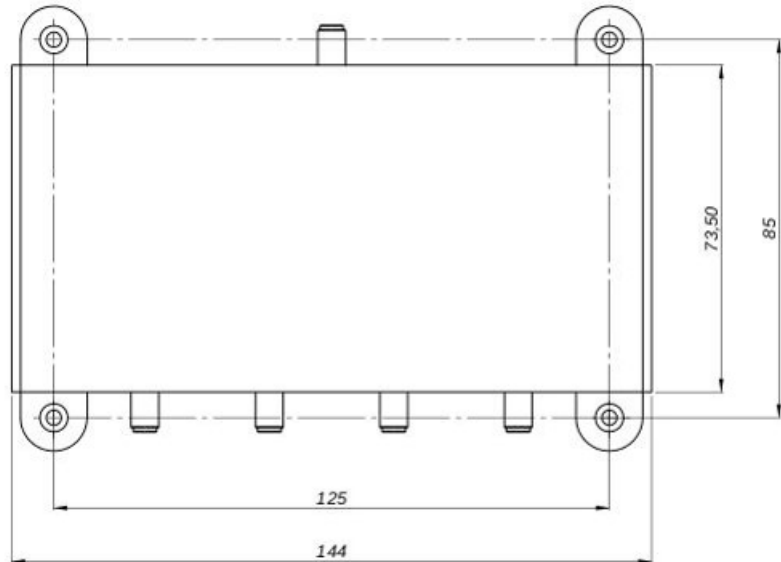
AdvanSplitter-4 has very low insertion loss, typically 0.7 dB above the 6 dB split.

AdvanSplitter-4 has been designed to keep its performance even when one or some ports are not connected to any antenna.

Technical specifications

Operating frequency	860 MHz to 950 MHz
Number of ports	4
Insertion loss (above 6 dB)	0.7 dB (typ.), 1.1 dB (max)
Input return loss	14.0 dB typical, 12.0 minimum
Output return loss	17.0 dB typical, 15.0 dB minimum
Maximum input power isolation	26.0 dB typical, 22.0 dB minimum
Maximum input power	33 dBm
Phase unbalance	2°
Amplitude unbalance	0.3 dB
RF connectors	1 input and 4 output SMA 50 ohm female connectors
Weight with enclosure	186 gr (6.6 oz)
Weight without enclosure	52 gr (1.8 oz)
Size with enclosure	145 mm x 92 mm x 25 mm (5.7 inch x 3.6 inch x 1.0 inch)
Size without enclosure	137 mm x 92 mm x 14 mm (5.4 inches x 3.6 inches x 0.6 inch)
Operating temperature	-30 °C to 55 °C
Storage temperature	-40 °C to 85 °C
EU Directives	RoHS compliant (2002/95/EC), EMC (2004/108/EC)

Mechanical specifications



Units in millimeters and [inches]

Product codes for ordering

ADSP	-	NP	-	F	CT	-	mmm	
								NP = Number of Ports
		2						2 ports
		4						4 ports
		8						8 ports
								F = Frame
				e				Enclosure (only for model with 2 and 4 ports)
								no enclosure
								CT = connector type
					SMA			SMA Straight PCB mount
					MCX			MCX connector (only available in edge mount and flange straight)
								mmm = Model
							110	Model number

Examples:

ADSP-4-SMA-110:

- AdvanSplitter
- 4 ports
- without enclosure
- SMA connector type
- Model 110



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