



# keonn

Modular RFID  
Components

## AdvanSplitter-2™ RFID UHF power splitter





### Benefits:

- 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:

- Any RFID application that requires long read ranges
- Any RFID application that requires narrow beamwidths

### Product overview

AdvanSplitter-2 is a high performance two port power splitter designed for RFID UHF applications.

AdvanSplitter-2 can combine different Keonn antennas in new ways, creating new antennas with longer read range and narrower beamwidth.

Some examples of antenna combinations are the following:

- Two Advantenna-p11 can be connected to AdvanSplitter to create an antenna array of 1 x 2 elements
- Two Advantenna-p13 (antenna array of 1 x 3 elements) can be connected to AdvanSplitter to create an antenna array of 1 x 6 elements

AdvanSplitter-2 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-2 can also be used in systems where reading speed is critical and tag location is not determinant.

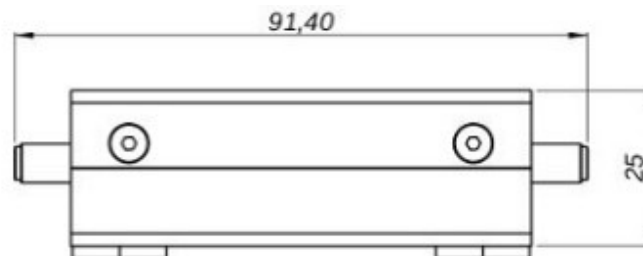
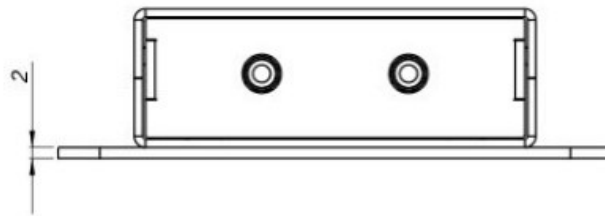
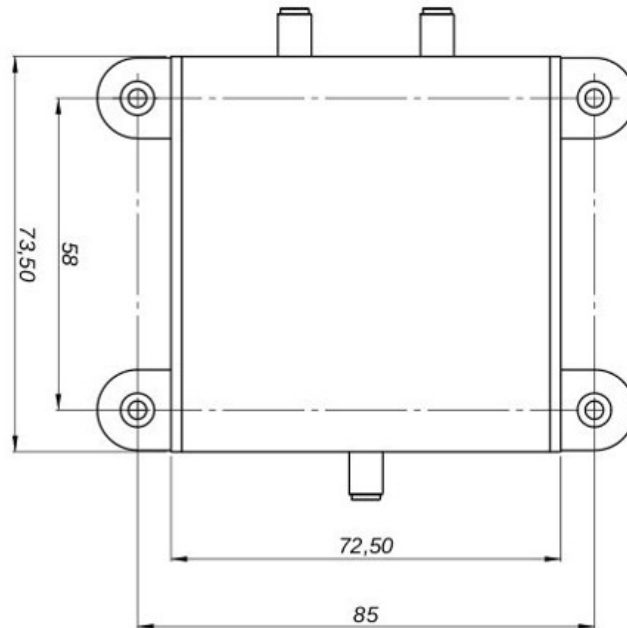
AdvanSplitter-2 has very low insertion loss, typically 0.4 dB above the 3 dB split.

AdvanSplitter-2 has been designed to keep its performance even when one port is not connected to any antenna.

### Technical specifications

Operating frequency	860 MHz to 950 MHz
Number of ports	2
Amplitude unbalance	0.3 dB
Insertion loss (above 3 dB)	0.6 dB (typ.), 0.8 dB (max.)
Input return loss	24.0 dB typical, 22.5 dB minimum
Output return loss	22.0 dB typical, 21.0 dB minimum
Maximum input power isolation	33.0 dB typical, 23.5 dB minimum
Phase unbalance	< 1°
Amplitude unbalance	0.3 dB
Maximum input power	33 dBm
RF connectors	1 input and 2 output SMA 50 ohm female connectors
Weight with enclosure	107 gr (3.8 oz)
Weight without enclosure	28 g (1.0 oz)
Size with enclosure	92 mm x 73 mm x 26 mm (3.6 in x 2.9 in x 1 in)
Size without enclosure	92 mm x 67 mm x 14 mm (3.6 in x 2.6 in x 0.6 in)
Operating temperature	-40 °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	
								<b>NP = Number of Ports</b>
		2						2 ports
		4						4 ports
		8						8 ports
								<b>F = Frame</b>
				e				Enclosure (only for model with 2 and 4 ports)
								no enclosure
								<b>CT = connector type</b>
					SMA			SMA Straight PCB mount
					MCX			MCX connector (only available in edge mount and flange straight)
								<b>mmm = Model</b>
							110	Model number

Examples:

#### ADSP-2-eSMA-110:

- AdvanSplitter
- 2 ports
- with enclosure
- SMA connector type
- Model 110

#### ADSP-2-SMA-110:

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



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