

# RA0003

## Antenna Multiplexer



### Overview

The **RA0003** module is a 1 to 4 UHF antenna multiplexer that allows to increase the number of antenna ports of CAEN RFID readers. On single antenna readers (i.e. Quark or QuarkUp) it permits to implement low/medium range portals or other applications requiring up to 4 antennas. On 4 port readers it permits to implement smart shelves or other application requiring up to 16 antennas.

**RA0003** has SMA RF connectors, is able to manage up to 2W RF power and can be used in the whole range of UHF RFID worldwide band.

The module has an extended supply voltage range (9Vdc÷36Vdc) and TTL level address signals.

Five LEDs provide the user with information about module operation.

### Features

- 1 to 4 antenna multiplexer
- Covers the 860÷960 Mhz freq. range
- 9V DC to 36 V DC supply voltage range
- SMA RF connectors
- TTL level address signals

### Technical Specification Table

<b>Frequency Range</b>	860÷960 MHz
<b>RF Port Impedance</b>	50 Ohm
<b>RF Power</b>	Up to 2W
<b>Insertion Loss</b>	1.5dB typical
<b>Return Loss</b>	22 dB typical
<b>Isolation</b>	27 dB Typical
<b>RF Connectors Type</b>	SMA jack
<b>Power Supply</b>	- 9V DC ÷ 36V DC - 350 mW max.
<b>Control Voltage Range</b>	9V DC ÷ 36V DC
<b>User Interface</b>	- Green LED: power - Yellow LEDs: selected antenna information
<b>Operating Temperature</b>	-20 °C to +70 °C
<b>IP Rating</b>	IP30
<b>Dimensions</b>	- (L) 65 x (W) 93 x (D) 35 mm <sup>3</sup> - 2.6 x 3.7 x 1.4 inch <sup>3</sup>
<b>Weight</b>	155 g.

### Ordering Options

<b>WRA0003XAAAA</b>	RA0003 - UHF Antenna Multiplexer		