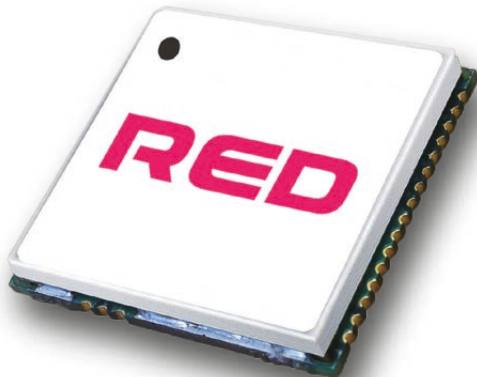




# RED Series UHF



RED Series OEM RFID UHF modules offers superior performance, small form factor and advantages in time-to-market to customers.

Applicable for high performance RFID reader but also suitable for small-sized mobile RFID reader.

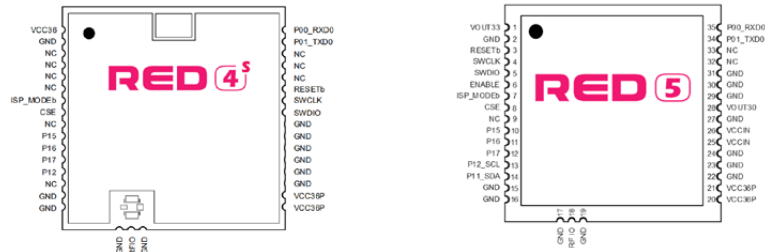
Key features	Key Benefits
Leakage cancellation	<ul style="list-style-type: none"> <li>Automatic Tx Leakage Cancellation</li> <li>Less variation by different antenna</li> <li>Easier optimization</li> </ul>
Pre-qualified, pre-tested, RF design fully integrated	<ul style="list-style-type: none"> <li>Highly reliable solution</li> <li>Easier design / save development time</li> </ul>
Micro-sized form factor	<ul style="list-style-type: none"> <li>SMD-like component to fit small applications</li> </ul>
Fully integrated	<ul style="list-style-type: none"> <li>Integrated Reader chipset, TCXO, Balun, Coupler, Saw Filter, Power Amp and low pass filter</li> </ul>
Compatible with EPC Gen2 V2.0	<ul style="list-style-type: none"> <li>Future-ready module</li> </ul>

Product	Output Power	Read Range	Size (W x L x H)
	27dBm	2.5m with 2.5dBi antenna in anechoic chamber	24 x 24 x 3mm
	30dBm	5.5m with 2.5dBi antenna in anechoic chamber	24 x 24 x 3mm

# RED Series UHF

	RED 4S	RED 5
Reader Chipset	PR9200	
Air Protocol	ISO 18000-63(6C)/EPC Gen2	
Channel Share	Frequency Hopping or LBT (Listen-Before-Talk)	
Modulation	DSB-ASK	
Encoding	Miller 2, 4, 8 and FM0 (default M8)	
Interface	UART(default), I2C, SPI	UART(default), I2C
Supply Voltage	3.3V (DC±5%)	3.6V (DC±5%)
Output Power	27 dBm typ. (Adjustable by 1dB step)	30 dBm typ. (Adjustable by 1dB step)
Dynamic Range	8dB typ.	30dB typ.
Power Consumption	540mA @ 25dBm CW 20mA @ idle mode > 10mA @ power down mode	1.3A @ 30dBm CW 20mA @ idle mode
Leakage Cancellation	Available	
Max Read Range	2.5m with 2.5dBi antenna (in anechoic chamber)	5.5m with 2.5dBi antenna (in anechoic chamber)
Size (W x L x H)	24 x 24 x 3mm	
Weight	3g	

Pin diagram



## We suggest



Antenna QUBE  
Ceramic Antenna



Antenna PATCH  
Ceramic Antenna