



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# USB *Plus+* RFID Reader

## World-class UHF RFID Desktop Reader



The ThingMagic USB *Plus+* RFID Reader is ideal for applications that require reading and writing of EPC Global Gen2 tags on a desk or workstation and in areas where space is limited. The USB *Plus+* is controlled and powered by a host PC or laptop through a USB interface and is compatible with ThingMagic's application development tools, permitting rapid creation of RFID solutions. With a software adjustable read distance up to 3 ft (0.91 m), the USB *Plus+* supports a variety of applications, including RFID tag commissioning, manufacturing WIP, document tracking, library book check in/out, retail point of sale, event and hospitality services, hospital patient workflows, and more. The high-performance internal antenna of the USB *Plus+* is also ideal for commissioning high memory tags and reading small form factor RFID tags more effectively.

Ordering Information	
Reader	USB-5EC
Development Kit	USB-5EC-DEVKIT
Tag / Transponder Protocols	
RFID Protocol Support	EPCglobal Gen 2 (ISO 18000-6C) with Anti-Collision and DRM
RF Interface	
Antenna	Internal linear polarized antenna with peak Gain 1 dBi from 860-960 MHz
RF Power Output	Separate read and write levels (into the antenna) are command-adjustable from 10 dBm to 23 dBm (200mW), +/- 1.0 dBm accuracy
Frequency	Pre-configured for the following regions: FCC 902-928 MHz (Americas) ETSI 865.6-867.6 MHz, 869.85 MHz (EU) KCC 917-920.8 MHz (Korea) TRAI 865-867 MHz (India) ACMA 920-926 MHz (Australia) SRRC-MII 920-925 MHz (P. R. China) 'Open' (Customizable) 860-960 MHz
Data/Control Interface	
Physical	USB mini-B connector, with 2 foot (61 cm) cable terminated in A-type plug
Signaling	Asynchronous serial interface with 3.3/5V logic levels; baud rates from 9600 to 921,600 bps
I/O	Two I/O command controlled LEDs and two I/O command queried switches
Protocol	Command-response protocol protected by length field and 16-bit CRC
Physical	
Dimensions (not including stand)	97 mm L x 61 mm W x 25 mm H (3.8 in L x 2.4 in W x 1.0 in H)

Regulatory & Safety	
Regulatory	FCC 47 CFR Ch.1 Part 15 Industrie Canada RSS-210 ETSI EN 302 208 v1.4.1
Safety	IEC 60950-1 (ed.2) US-17650-UL
Power	
DC Power Required	DC Voltage: 5 VDC (Powered by USB interface)  DC Power: 2.7 W (540 mA ) max Supplied interface cable terminates in two type-A plugs: one for power and signal, the second for additional power if needed
Idle Power Consumption	1.7 W max at idle (Power management modes can be used to reduce this to as little as 0.1 W)
Environment	
Operating Temp.	-20C to +60C
Storage Temp.	-40C to +85C
Architecture	
User-accessible Flash Memory	16 kB
Tag Buffer	200 tags
Performance	
Tag Read Rate	Up to 200 tags/second
Max Read Distance	Up to 3 ft (0.91 m) depending on tag sensitivity and orientation

Specifications subject to change without notice.

