



## Desktop Reader

### World-class UHF RFID Desktop Reader

The ThingMagic Desktop Reader allows solutions developers to support applications that require desktop reading and writing of EPC Global Gen2 tags. Based on the best-in-class M5e-Compact UHF RFID module, the Desktop Reader is controlled by, and powered from, a host PC or laptop through a USB interface. The ThingMagic Desktop Reader is compatible with ThingMagic's application development tools, including Reader Assistant, permitting rapid creation of solutions to support a wide range of rewarding applications.

Tag / Transponder Protocols	
RFID Protocol Support	EPCglobal Gen 2 (ISO 18000-6C) with Anti-Collision and DRM
RF Interface	
Antenna	Internal ceramic antenna with an average gain of -2.6 dBi from 860 to 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 (NA, SA) 902-928 MHz ETSI (EU) 865.6-867.6 MHz, 869.85 MHz MIC (Korea) 910-914 MHz SRRC-MII (P.R.China) 920-925 MHz 'Open' (Custom) 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
GPIO Sensors and Indicators	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)	3.8 in L x 2.4 in W x 1.0 in H 97 mm L x 61 mm W x 25 mm H

Power	
DC Power Required	DC Voltage: 5 VDC (Powered by USB interface)  DC Power: 2.9 W (570 mA ) max  Supplied interface cable terminates in two type-A plugs: one for power and signal, the second for additional power if necessary.
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	
Regulatory	FCC 47 CFR Ch. 1 Part 15 Industrie Canada RSS-21 0 ETSI EN 302 208 ETSI EN 300 220
Operating Temp.	-20C to +60C
Storage Temp.	-40C to +85C
Architecture	
RFID ASIC	Intel R1000
User-accessible Flash Memory	16 kB
Tag Buffer	200 tags
Performance	
Tag Read Rate	Over 190 tags/second
Tag Read Distance	Up to 12 inches (31 cm) depending on tag sensitivity and orientation

\*Maximum power may have to be reduced to meet regulatory limits, which specify the combined effect of the module, antenna, cable, and enclosure shielding

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