The ThingMagic USBPro RFID Reader allows solutions developers to support applications that require desktop reading and writing of EPC Global Gen2 tags, as well as other protocols such as ISO18000-6B, IPx and AEI ATA (read only) through additional license. Based on ThingMagic’s M6e-Micro module, the USBPro RFID Reader is controlled and powered by a host PC or laptop through a USB interface and supports autonomous operation. The USBPro RFID Reader is compatible with ThingMagic’s MercuryAPI application development tools, including Universal Reader Assistant, permitting rapid creation of solutions. USBPro supports a wide range of applications, including tag commissioning, manufacturing work in progress, document tracking, retail Point of Sale, and workflows for healthcare, events, and hospitality.

### Ordering Information

<table>
<thead>
<tr>
<th>Reader</th>
<th>USB-6EP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Kit</td>
<td>USB-6EP-DEVKIT</td>
</tr>
</tbody>
</table>

### Tag / Transponder Protocols

| RFID Protocol     | EPC Gen2v2 ISO18000-63 standard ISO18000-6B, IPx, AEI ATA (read only) are available through additional license |

### RF Interface

<table>
<thead>
<tr>
<th>Antenna Ports</th>
<th>Internal antenna with an average gain of +1 dBi from 865-869MHz and 902-928MHz, External RP-SMA antenna connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF Power Output</td>
<td>Separate read and write levels (into the antenna) are command-adjustable from -5 dBm to 30 dBm* (1W), +/- 1.0 dBm accuracy with +20dBm default</td>
</tr>
<tr>
<td>Frequency</td>
<td>Pre-configured for the following regions: FCC 902-928,917.4-927,917.5-922.5 MHz (Americas), ETSI 865.6-867.6 MHz, 869.85 MHz (EU), TRAI 865-867 MHz (India), KCC 917-920.8 MHz (Korea), ACMA 920-925 MHz (Australia), SRRC-MII 920-925 MHz (P. R. China), MIC 916.7-920.9 MHz (Japan), Open (Customizable) 865-869 and 902-928 MHz</td>
</tr>
</tbody>
</table>

### Data/Control Interface

<table>
<thead>
<tr>
<th>Physical</th>
<th>USB Micro-B connector, with removable six (6) foot cable with dual USB-A type plug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signaling</td>
<td>USB 2.0</td>
</tr>
<tr>
<td>Input/Output</td>
<td>Two I/O command controlled LEDs and two I/O command queried switches</td>
</tr>
<tr>
<td>Protocol</td>
<td>Command-response protocol protected by length field and 16-bit CRC</td>
</tr>
</tbody>
</table>

### Regulatory Information

<table>
<thead>
<tr>
<th>Regulatory</th>
<th>FCC 47 CFR Ch. 1 Part 15, Industrie Canada RSS-21 0, ETSI EN 302 208 v3.1.1 (RED 2014/53/EU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>IEC 60950-1 (ed.2) US-17650-UL</td>
</tr>
<tr>
<td>Power</td>
<td>DC Voltage: 4.5 to 5.5 VDC from USB cable DC Power: 6.2 W max Supplied interface cable terminates in two type-A plugs: one for power and signal, the second for additional power if needed</td>
</tr>
<tr>
<td>Idle Power Consumption</td>
<td>0.35 W max at idle (Power management modes can be used to reduce this to as little as 0.1 W)</td>
</tr>
<tr>
<td>Environment</td>
<td>Operating Temp. -40°C to +60°C* Storage Temp. -40°C to +85°C</td>
</tr>
<tr>
<td>Architecture</td>
<td>User Memory 16 kB Tag Buffer 200 tags</td>
</tr>
<tr>
<td>Performance</td>
<td>Tag Read Rate 50 tags/second Tag Read Distance Up to 10 m (30 feet) with external antenna and up to 1.2 m (4 feet) depending on tag Sensitivity and orientation with internal Antenna with max RF power.</td>
</tr>
</tbody>
</table>

*Duty cycle restrictions based on temperature, tx power >23dB*