

**PURCHASE REQUEST**

Department: Provincial Engineer's Office  
 Section: \_\_\_\_\_  
 PR No. \_\_\_\_\_  
 SA No. \_\_\_\_\_  
 ALOSB No. \_\_\_\_\_

Item No.	Quantity	Units	Item Description
1	1	unit	CAD Pro Pertual License w/ 1 year maintenance, Upgrade and atleast 3 days on site training
2	1	unit	<p><b>Drone For Survey</b></p> <p>Specification:</p> <p>(1) Computer Aided Design Perpetual License including 1 year maintenance/upgrade and 1 day onsite training by qualified PH engineer</p> <p>(1) DRONE SET with:</p> <ul style="list-style-type: none"> <li>· 2 x extra batteries additional</li> <li>· 1 x iPad mini 128Gb Tablet (Mobile Controller Device)</li> <li>· 1 x Branded Laptop with high end specs for Data Processing</li> <li>· 1 x 3D Reality Modeling Software Perpetual License - 3D Reality Modeling Software Perpetual License for processing software capable of producing high end 3D mesh models with export in multiple design formats (MX, Civil 3D, MicroStation etc.) for DTM creation and point cloud import to merged model, tiled model processing for memory management, and scalable mesh. including (1) year maintenance upgrade on the processing software, DVD installer, tutorial booklets and 2days detailed training by qualified PH engineer</li> </ul> <p><b>PHANTOM 4 RTK Specs</b></p> <p>Aircraft</p> <p>Takeoff Weight: 1391 g</p> <p>Diagonal Distance: 350 mm</p> <p>Max Service Ceiling Above Sea Level: 19685 ft (6000 m)</p> <p>Max Ascent Speed: 6 m/s (automatic flight); 5 m/s (manual control)</p> <p>Max Descent Speed: 3 m/s</p> <p>Max Speed: 31 mph (50 kph)(P-mode), 36 mph (58 kph)(A-mode)</p> <p>Max Flight Time: Approx. 30 minutes</p> <p>Operating Temperature Range: 32° to 104° F (0° to 40°C)</p> <p>Operating Frequency: 2.400 GHz to 2.483 GHz (Europe, Japan, Korea), 5.725 GHz to 5.850 GHz (United States, China)</p> <p>Transmission Power (EIRP): 2.4 GHz - CE (Europe) / MIC (Japan) / KCC (Korea) : &lt; 20 dBm, 5.8 GHz - SRRC (China) / FCC (United States) /NCC(Taiwan,China) : &lt; 26 dBm</p> <p>Hover Accuracy Range:</p> <p>RTK enabled and functioning properly:</p> <p>Vertical : ±0.1 m ; Horizontal : ±0.1 m</p> <p>RTK disabled:</p> <p>Vertical : ±0.1 m (with vision positioning) ; ±0.5 m (with GNSS positioning);</p> <p>Horizontal : ±0.3 m (with vision positioning) ; ±1.5 m (with GNSS positioning)</p> <p>Image Position Offset: The position of the camera center is relative to the phase center of the onboard D-RTK antenna under the aircraft body's axis:(36, 0, and 192 mm) already applied to the image coordinates in Exif data. The positive x, y, and z axes of the aircraft body point to the forward, rightward, and downward of the aircraft, respectively.</p> <p><b>Mapping Functions</b></p> <p>Mapping Accuracy **: Mapping accuracy meets the requirements of the ASPRS Accuracy Standards for Digital Orthophotos Class III, ** The actual accuracy depends on surrounding lighting and patterns, aircraft altitude, mapping software used, and other factors when shooting.</p>