Compliance Sheet of Specifications and Features of Image Processing Software

Description

Software for performing photogrammetric processing of digital satellite images.

S.No.	Specfication/Feature	Compliance (To be filled by Vendor/Supplier)
1.	**Satellite imagery processing** a. Common processing workflow for panchromatic and multispectral satellite images.	Yes/No
2.	**Multispectral imagery processing** a. RGB/NIR/thermal/multispectral imagery processing. b. Fast reconstruction based on preferable channel. c. Multichannel orthomosaic generation and user-defined vegetation indices (e.g. NDVI) calculation and export.	Yes/No
3.	**Georeferenced orthomosaic generation** a. Georeferenced orthomosaic b. Export in blocks for huge projects. c. Color correction for homogeneous texture. d. Custom planar and cylindrical projection options for close range projects.	Yes/No
4.	**Photogrammetric triangulation** a. Processing of various types of imagery: aerial (nadir, oblique), close-range, satellite. b. Auto calibration c. Multi-camera projects. d. Scanned images with fiducial marks support.	Yes/No
5.	**Digital elevation model: DSM/DTM generation and editing** a. Digital surface and/or digital terrain model b. Georeferencing based on EXIF meta data, GCPs data. c. EPSG registry coordinate systems support: WGS84, UTM, etc. d. Configurable vertical datums based on the geoid undulation grids. e. DEM editing: breaklines drawing, fill tools.	Yes/No
6.	**Dense point cloud: editing and classification** a. Elaborate model editing for accurate results. b. Automatic multi-class points classification to customize further reconstruction. c. Import/export to benefit from classical point data processing workflow.	Yes/No
7.	**Ground control points / scale bar support** a. GCPs import for georeferencing and control over the accuracy of the results. b. Coded/non-coded targets auto-detection for fast GCPs input. c. Scale bar tool to set reference distance without positioning equipment.	Yes/No

8.	**Measurements: distances, areas, volumes** a. Inbuilt tools to measure distances, areas and volumes. b. To perform more sophisticated metric analysis the products of photogrammetric processing can be smoothly transferred to external tools thanks to a variety of export formats.	Yes/No
9.	**Python and Java API** a. Python scripting and Java bindings for sophisticated automation and customization. Adding custom processing operations to the complete job automation and integration to Python or Java pipeline.	Yes/No
10.	**Network processing** a. Distributed calculations over local computer network to use combined power of multiple nodes for huge data sets processing.	Yes/No
11.	**Cloud processing** a. Cloud processing interface allows saving on the hardware infrastructure for photogrammetric pipeline, with further option to visualize and share the variety of the processing results online with colleagues or customers, as well as to embed published projects in your own web platforms.	Yes/No
12.	**LiDAR data support** a. Aerial LiDAR point attributes support. b. External registration support for laser scans. c. Marker-based alignment of laser scans. d. Laser scans visualization in Model view. e. Ground points classification adapted for LiDAR data.	Yes/No
13.	**Stereoscopic measurements** a. Professional 3D monitors and 3D controllers support for accurate and convenient stereoscopic vectorization of features and measurement purposes.	Yes/No
14.	**3D model: generation and texturing** a. Various scenes: archaeological sites, artifacts, buildings, interiors, people, etc. b. Direct upload to various online resources and export to many popular formats. c. Photorealistic textures: HDR and multifile support (incl. UDIM layout).	Yes/No
15.	**Hierarchical tiled model generation** a. City scale modeling preserving the original image resolution for texturing.	Yes/No
16.	**4D modeling for dynamic scenes** a. Multi camera rig data processing for creative projects in cinematographic art, game industry, etc. b. Basis for numerous visual effects with 3D models reconstructed in time sequence.	Yes/No
17.	**Panorama stitching** a. 3D reconstruction for data captured from the same camera position — camera station, provided that at least 2 camera stations are present. b. 360° panorama stitching for one camera station data.	Yes/No

18.	**Automatic powerlines detection** a. Straightforward and time-efficient for large-scale projects since requires only aligned images as the input. b. Results export in a form of a 3D polyline model for every wire.	Yes/No
19.	**License Type:** Perpetual floating license. Qty. 02 (two).	Yes/No
20.	**Version**: Professional	Yes/No
21.	**Operating System**: Linux and Windows	Yes/No
22.	**Upgrade support (Patches and Bug Fixes)**: One year	Yes/No