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Features		Advantages	
INPUTS	Aerial images (nadir and oblique)		Geolocated JPEG images from the most popular drone manufacturers' cameras providing the recommended XMP tags (position and orientation)
	Video (Parrot Anafi only)		Automatically extracts still frames from videos (.mp4) to create a project
PHOTO-GRAMMETRIC DATA PROCESSING	Asset-specific processing optimization		Obtain the best quality output for a class of asset (for example, cell phone tower)
	Camera self-calibration		Optimize internal camera parameters, such as focal length, principle point of autocollimation and lens distortions
	Automatic Aerial Triangulation (AAT) and Bundle Block Adjustment (BBA)		Process automatically with or without known camera exterior orientations (x, y, z, w, f, k)
	Automatic point cloud densification		Produce a dense and detailed 3D point cloud, which can be used as a basis for DSM and 3D mesh
	Automatic point cloud filtering and smoothing		Use presets for point cloud filtering and smoothing options
	Automatic brightness and color correction		Compensate automatically for change of brightness, luminosity and color balancing of images
PHOTO-GRAMMETRIC OUTPUT FILES	2D outputs		Orthomosaic
			DSM
			High-resolution images
	3D outputs		Point cloud
			3D mesh
ASSET MANAGEMENT	Geolocation of assets in a map dashboard		Intuitive file organization for smoother workflows
	Unlimited asset creation		Create as many assets as needed
	Share assets with collaborators		Align stakeholders with secure information sharing
	Map filtering		Filter assets by zooming in or out of the map
	Cloud data storage		Store information securely and access from anywhere in the world
	Selectable data processing and storage location		Select data processing and storage location Use secure servers located in the US, Germany, Japan or Korea

INSPECTION TOOLS	2D and 3D data visualization		Visualize 2D maps and 3D models using any web browser Mesh and point cloud visualization options Real-time shading for digital surface model (DSM) visualization
	Distance measurements map/3D		Measure distances using either the map or 3D view
	Area measurements map/3D		Measure areas using either the map or 3D view
	Volume measurements map/3D		Measure volumes using either the map or 3D view
	Geolocalized image position representation		Location and camera orientation information is linked to each image to give additional context when navigating the asset
	Support for non-drone images		Include images taken with a cellphone, tablet or other camera as well as those taken by drone
	Image navigation capabilities		Select an image from either the 2D or 3D view, the carousel or image list. Toggle between images in the same order in which they were taken for easier inspection
	Image filtering capabilities		Reduce the number of images to a sub-set for a streamlined visual inspection
	Image recommendation capabilities		Click in any location in 2D or 3D and get a recommended image containing the selected point
	Master cameras		Reduce the number of images to inspect by displaying the minimum amount necessary to fully cover the digital twin.
	Camera navigation in sync between 2D and 3D		Navigate seamlessly between the 2D and 3D views
	3D screenshot		Take screenshots in the 3D view
	Image annotation by severity level		Rank images in order of severity. Images can be annotated as soon as they are uploaded, without waiting for photogrammetric processing to complete
	Image reviewed mark		Mark images as reviewed to give an overview of the asset
	Export inspection report in JSON and .PDF		The PDF report can include the customer's logo
	Automated report		Export a report containing all the annotations, antennas, and measurements
	Elevation profiles		Automatically calculate the elevation of a section of your project
	Units		Metric and Imperial
	Image annotations with type, severity level, 3D location, and external link		The 3D location of an annotated image is provided as an output. A marker is placed in the 2D/3D for visual awareness of the annotation within the asset. Link anything from the web or in shared drives.
ADVANCED ANALYTICS (TELECOM)	Automatic detection of panel and microwave antennas pose		Automatically calculate azimuth, downtilt, plumb and height from ground and dimensions
	Panel antenna inventory		Including antenna properties and key pictures
	Microwave antenna inventory		Including antenna properties and key pictures
	Ancillary boxes inventory		Including properties and key pictures
	3D visualization of identified panel and microwave antennas		View the asset in 3D
	Point cloud clipping		Trim the point cloud to include only the most essential data
	On-demand custom algorithm development and integration		Contact us to discuss developing or integrating custom algorithms to meet your specific needs
	Custom software integrations with 3rd party apps		Contact us to discuss how Pix4Dinspect outputs can be automatically pushed in your 3rd party software
MULTILINGUAL	Language options		English, Japanese, French, Italian and Spanish