3D Laser Scanning Options

Landair Surveys

SCANNING TYPE	SPECIFICATIONS		KEY PROS & CONS
Static (Faro Focus S150+) 	**Final Pointcloud Accuracy** Externals: up to +/- 3mm – 5mm Internals: up to +/- 3mm – 10mm	**Range** Up to 150m	**Pros** - higher accuracies compared to mobile scanning - scanner can be raised vertically on extendible tripod - structured pointclouds by default - greater distance range **Cons** - longer fieldwork times (higher cost) - potential line of sight issues - larger data sets
	Final Pointcloud Deliverables Structured pointcloud (with embedded photo-spheres) Unstructured pointcloud (without photo-spheres)	**Normal Pointcloud Density** 2mm – 5mm (decreases for longer distances from scanning traverse)	
Mobile (VLX-3) 	**Final Pointcloud Accuracy** Externals: up to +/- 15mm Internals: up to +/-10mm	**Range** Up to 50m	**Pros** - faster fieldwork times (cost savings) - line of site issues minimised - applies noise filtering algorithm to final data set - smoother colour rendering **Cons** - lower accuracies compared to static scanning - unstructured pointclouds only - requires built environment for stable site geometry (i.e. no fields)
	Final Pointcloud Deliverable Unstructured pointcloud (without photo-spheres)	**Normal Pointcloud Density** Default 5mm (decreases for longer distances from scanning traverse)	