TerraScan

Main Window Commands

File	Full Lite UAV	Point		Full	Lite	UAV	Classify		Full L	ite UAV	Tools		Full	Lite	UAV
Open block	x x	Undo classification		x	x	х	Routine	By class	x	x x	Toolboxes	Main tool box	х	х	x
Open inside fence	x x	From list		x	x	х		Air points	x	х		General	х	х	x
Read points	x x x	Edit selected		x	x	х		Closeby points	x	x		View laser	х	х	x
Read directory	x x x	Select by class		x	x	х		Isolated points	x	x		Draw	х	х	х
Read reference points	x x x	Find		x	x	х		Low points	x	x		Model	х	х	х
Save points	x x x	Delete	Selected points	х	x	x		Ground	x	x		Groups	x	x	x
Save points As	x x x		By point class	x	x	x		Hard surface	x	x		Vectorize wires	x		x
Close points	x x x		By line	x	x	x		Surface points	x	x		Vectorize towers	х		x
			Inside fence	x	x	x		Below surface	x	x		View powerline	x	x	x
Output	Full Lite UAV	1	Outside fence	x	x	x		By height from ground	x	x		Waveform	x	~	~
Output alignment report	x x x		Using centerline	x		x		By absolute elevation	x	x		Road	x		x
Create surface model	x x x		osing centernite	^	^	^		By distance	x	x		Railroad	x	x	x
Export lattice model	x x x	Group		Full	Lite			By echo	x	x		Buildings	x	x	x
Export raster image	x x x	Assign groups		x	x	x		By echo difference	x	x		Building patches	x	x	x
								· ·							
Write to design file	x x x	Test parameters	D hard sould	x	x	x		By echo length	x	x		Building edges	x	x	x
Write as line strings	x x x	Classify	By best match	х	-	x		By intensity	x	x	Characteria (Trees	x	x	x
1.e.	le ului luuri		By class	x		х		By color	x	x	Show statistics		x	x	x
View	Full Lite UAV	N	By centerline	x	х	х		By centerline	x	x	Macro*		x		x
Small dialog	x x x		By distance	х		х		By section template	x	x	Addon	View histogram	х	x	x
Medium dialog	x x x		By parameters	х		х		By time stamp	x	x	Draw bounding box		x	x	x
Large dialog	x x x		By vegetation index	х		х		By angle	x	x	Draw into profile		x	х	x
Wide dialog	x x x		One point per group	х		х		By scan diection	x	x	Draw into sections		x	х	x
Fields	x x x		Moving objects	х		х		By normal vector	x	x	Draw polygons		х	х	х
Header records	x x x		Trees	х		x		By range	x	х	Smoothen points		x	x	x
Fit view	x x x		Non-grouped points	х		х		By scanner	x	х	Thin points		x	х	x
Display mode	x x x	Clear by class		х	х	х		By vegetation index	x	х	Adjust to geoid		x	х	х
		Copy from closest		х	х	x		Railroad	х	x	Convert geoid model		х	х	х
Line ¹	Full Lite UAV	Split by class		х	х	x		Buildings	x	x	Transform loaded points		x	х	х
Deduce using time	x x x	Inspect groups		х	x	x		Walls	x	х	Transform known points		x	x	x
Deduce from order	x x x			·		1		Model keypoints		х х	Output control report		x	х	x
Start at new selection	x x x							Contour keypoints		x x	Assign color to points		x	х	x
Modify numbering	x x x							Tunnel surfaces	x		Compute distance		x	x	x
Draw from points	x x x						Inside fence			x x	Compute normal vectors		x	x	x
Adjust laser angles	x x x						3D Fence			x x	Extract color from images		x	x	x
Cut long range	x x						Trajectory interval		x	x	Extract echo properties		x	x	x
Cut overlap	x x						Detect plane		x	x	Fit to reference		x	x	x
Fit using targets	x x x						Detect trees		x	x	Compare with reference		x	x	x
Translate							Add point to ground		x	x	Sort	By time stamp	_		x
							Add point to ground		X	X	Sort		x	x	
Rotate		_					Macro window		E.U.I.	ite UAV		By line and time	x	x	x
¹ for airborne/mobile points on	ly							NL.		_		By line, scanner and time	х	x	x
Management 2	-		TCI	1			FIIe	New	x	x		By xy location	x	x	х
Measurement ²	Full Lite UAV		τ сι					Open	x	x		By increasing X	x	x	x
Translate	x x x				J	\sim		Save	x	х		By decreasing X	x	x	x
Rotate	x x x							Save as	x	x		By increasing Y	х	х	x
Place target object	x x x						Run	On loaded points	x	x		By decreasing Y	х	x	x
Transform	x x x							On selected files	x			By increasing Z	х	х	х
Fit point clouds	x x x											By decreasing Z	х	х	x
Modify numbering	x x x	<u> </u>									Read	Building models	х	x	x
² for static terrestrial points only	у											Paint lines	х	x	x
												Poles	х	х	x
												Polygons	x	х	x
												Section parameters	х	х	x
												Slope arrows	x	x	x
												Tree cells	х	x	x
												Wires	x	x	x

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TerraScan

Main Tool Box

General	Full	Lite	UAV
Scan settings	х	х	х
Scan define coordinate setup	х	х	х
Define classes	х	х	х
Design block boundaries	х	х	
Define project*	х	х	
Manage trajectories*	х	х	х
Load airborne points	х	х	х
Load ground points	х	х	х
About TerraScan	х	х	х
Help on TerraScan	х	х	х

* details in separate table

View Laser	Full	Lite	UAV
Draw vertical section	х	х	х
Draw horizontal section	x	х	х
Draw plane section	x	х	х
Move section	x	х	х
Rotate section	x	х	х
Cut section	x	х	х
Travel path	x	х	х
Travel view	х	х	х
Synchronize views	x	х	х
Show street view	x	х	х
Measure point density	x	х	x ⁵
Update distance coloring	x	х	х

⁵ no project capability

Draw	Full	Lite	UAV
Mouse point adjustment	х	х	х
Fit linear element	х	х	х
Drape linear element	х	х	х
Find breakline along element	х	х	х
Find curb along element	x	х	х
Cut linear element	х	х	х
Check footprint polygons	х	х	х
Set polygon elevation	х	х	х
Place collection shape	х	х	х
Find pipes	х	х	х
Vetorize tunnel sections	х	х	х
Check tunnel sections	х	х	х
Inspect elements	х	х	х

Groups	Full	Lite	UAV
Create point group	х	х	х
Merge point groups	х	х	х
Add points to group	х	х	х
Clear group fence	х	х	х

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Define	e Project	Full	Lite	UAV
ile	New project	x	х	
	Open project	x	х	
	Save project	x	х	
	Save project as	x	х	
	Edit project information	x	х	
	Import points into project	x	х	
	Import directory	x	х	
Block	Add by boundaries	x	х	
	Add using files	x	х	
	Edit definition	x	x	
	Delete definition	x	x	
	Merge blocks	x	x	
	Lock selected	x	x	
	Release lock	x	x	
	Draw boundaries	x	x	
	Create along centerline	x	x	
	Create along tower string	x	x	
	Transform boundaries	x	x	
ort				
ort	By name	X	x	
	By number	X	x	
	By point count	x	X	
	North to south	x	х	
	South to north	x	х	
	West to east	x	х	
	East to west	x	х	
ools	Run macro	x		
	Adjust to geoid	x	х	
	Adjust xyz	х	х	
	Convert storage format	x	х	
	Output control report	x	х	
	Show statistics	х	х	
	Check coverage	х	х	
	Validate blocks	х	х	
	Merge small blocks	х	х	
	Copy from reference	х	х	
	Extract color from images	х	х	
	Extract echo properties	х	x	
	Export lattice models	x	x	
	Export raster images	x	х	
	Export 3D ortho	x	х	
-	Output collections	x	х	
	Draw line boundaries	x	х	
J		C		_
ispla	yset	Full	Lite	UAV
	oints to displayset	x	х	х
			-	

Remove points from displayset

Clear displayset

x x x

x x x

Manage Tra	ijectories	Full	Lite	UAV
File	Set directory	x	х	х
	Import files	x	x	x
	Import directory	x	x	х
	Import scanner positions	x	x	х
	Deduce scanner positions	x	x	x
	Merge from GPS and INS	x	x	x
	Import accuracy files	x	x	x
	Output positions	x	x	х
Trajectory	Edit information	x	x	x
	Assign number	х	x	х
	Set accuracy	х	x	х
	Delete	х	х	х
	View positions	х	x	х
View	Sort	x	x	x
	Fields	x	х	х
Tools	Split	x	x	х
	Cut turnarounds	х	x	x
	Delete by polygons	x	х	x
	Split at laser gaps	x	х	x ⁵
	Link to waveform files	x	x	х
	Renumber trajectories	x	x	x
	Thin positions	х	х	х
	Transform	х	х	х
	Add lever arm	х	х	х
	Adjust to geoid	х	х	x
	Convert angles	х	x	х
	Convert time stamps	х	х	x
	Create macro	х	х	х
	Smoothen stops	х	х	x
	Draw into design	х	х	х
	⁵ no project capability			
	Model	Full	Lite	UAV
	Create editable model	х	х	х
	Assign point class	х	x	x
	Classify using brush	х	х	x
	Classify fence	x	x	х
	Classify above line	x	х	х
	Classify below line	х	x	x
	Classify close to line	x	x	х
the second second	Add synthetic point			

scanner posicions	~	~	~		chicch cu
rom GPS and INS	х	х	х		Assign w
accuracy files	х	х	х		³ in V
oositions	х	х	х		
rmation	х	х	х		Vectorize
umber	х	x	х		Place tov
racy	х	x	х		Edit towe
	х	х	х		Move to
sitions	х	х	х		Rotate to
	х	х	х		Add cros
	х	х	х		Set cross
	х	х	х		Extend ci
arounds	х	х	х		Rotate cr
y polygons	х	х	х		Modify c
aser gaps	х	х	x ⁵		Delete cr
vaveform files	х	х	х		Create at
er trajectories	х	х	x		Add atta
itions	х	х	х		Move att
m	х	х	х		Delete at
er arm	х	х	х		
o geoid	х	х	x	_	View Pov
angles	х	х	х		View tow
time stamps	х	х	х		Label tov
nacro	х	х	х		Label cat
en stops	х	х	x		Find dan
to design	х	х	х		Create sp
⁵ no project capability					Output c
					Export po
	Full	Lite	UAV	-	
ditable model	х	х	х		Railroad
oint class	х	x	x		Place rail
using brush	х	х	х		Fit railroa

x x x

x x x

x x x

x x x

Full Lite UAV

х

х

Vectorize Wires	Full	Lite	UAV
Place tower string	х		х
Activate power line	х	x ³	х
Detect wires	х		х
Place catenary string	х		х
Check catenary attachments	х		х
Assign wire attributes	x		х
³ in View Powerline tool ba	r		

Vectorize Towers	Full	Lite	UAV
Place tower	х		х
Edit tower information	х		х
Move tower	х		х
Rotate tower	х		х
Add cross arm	х		х
Set cross arm elevation	х		х
Extend cross arm	х		х
Rotate cross arm	х		х
Modify cross arm	х		х
Delete cross arm	x		х
Create attachments	x		х
Add attachment	x		х
Move attachment	х		х
Delete attachment	х		х
	-		_
View Powerline	Full	Lite	UAV
View tower spans	x	х	х
Label towers	X	х	х
	_		-
Label catenary height	x	x	x
Label catenary height Find danger objects	x x	x x	x x
Find danger objects Create span tiles Output catenary	x	x	x
Find danger objects Create span tiles	x	x x	x x
Find danger objects Create span tiles Output catenary Export powerline	x x x x x	x x x x x	x x x x x
Find danger objects Create span tiles Output catenary Export powerline Railroad	x x x	x x x x	x x x x
Find danger objects Create span tiles Output catenary Export powerline Railroad Place railroad string	x x x x x	x x x x x	x x x x x
Find danger objects Create span tiles Output catenary Export powerline Railroad Place railroad string Fit railroad string	x x x x x Full	x x x x x Lite	x x x x x UAV
Find danger objects Create span tiles Output catenary Export powerline Railroad Place railroad string Fit railroad string Find rails	x x x x Full x	x x x x x Lite x	x x x x x UAV
Find danger objects Create span tiles Output catenary Export powerline Railroad Place railroad string Fit railroad string Find rails Find wires	x x x x x Full x x	x x x x x Lite x x	x x x x v UAV x x
Find danger objects Create span tiles Output catenary Export powerline Railroad Place railroad string Fit railroad string Find rails	x x x x x Full x x x x	x x x x x Lite x x x x x	x x x x x v v v v x x x x

x x

x x x

Full Lite UAV

x x x

x x x

x x x

x x x

х

Find poles

Trees

Output poles

Create tree cells

Place tree cells

Modify tree cells

Output tree cells

Road	Full	Lite	UAV
Find automatic breaklines	х		х
Find road breaklines	x		х
mport road breaklines	x		х
Draw slope arrows	x		х
Draw sight distances	х		x ⁵
Draw sign visibility	х		x ⁵
abel clearance	х		х
abel alignment curvature	х		х
Write alignment elevations	х		х
Fit geometry components	х		

⁵ no project capability

Buildings	Full	Lite	UAV
Vectorize buildings	х		х
Construct roof polygons	х		х
Create buildings from polygons	х	х	х
Merge footprint polygons	x	х	х
Draw roof lines	x	х	х
Check building models	x	х	х
Write buildings to database	x		
Read buildings from database	x		
Delete database buildings	х		

Building Patches	Full	Lite	UAV
Split building	х	х	х
Split patch	х	х	х
Merge patches	х	х	х
Apply plane symmetry	х	х	х
Match roof elevation	х	х	х
Remove patch	х	х	х
Remove details	х	х	х
Draw building section	х	х	х
Extrude building	х	х	х

Building Edges	Full	Lite	UAV
Set all edges	х	х	х
Apply straight line	х	х	х
Apply intersection line	х	х	х
Modify edge	х	х	х
Move edge vertex	х	х	х
Align edge segment	х	х	х
Build step corner	х	х	х
Cut edge corner	х	х	х
Cut edge segment	х	х	х
Delete edge vertex	х	х	х
Insert edge vertex	х	х	х

Add synthetic point

Remove vegetation

Fix elevation Rebuild editable model

Waveform

View waveform

Extract echoes