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Ver. 2016.3.	Technical Specification		
	Start	Professional	Real-Time
I/O			
Input data from SEG-Y, SEG-2, SEG-B, SEG-1, SCS-3 files, with optional header remapping	х	х	х
Input data from SEG-D, SEG-D (rev.2) and FairFieldNodal Receiver Gather files,			
with optional header remapping		Х	Х
Input GPR data from LOGIS, Zond, RAMAC/GPR, GSSI, Pulse EKKO formats	х	х	х
Input trace from ASCII file	X	X	X
Input data from user-defined demultiplexed format with trace header			
information	Х	Х	Х
Reading data from tapes	Х	Х	Х
Data output to SEG-Y files	Х	Х	Х
Geometry assignment			
Import from ASCII	Х	Х	Х
Import from SPS and UKOOA P1-90 files		Х	Х
Calculation using built-in equation calculator	Х	Х	Х
Display and editing using built-in spreadsheet editor	Х	Х	Х
Dedicated module for near-surface geometry assignment	Х	Х	Х
Dedicated module for marine geometry assignment	Х	Х	Х
Dedicated module for VSP geometry assignment		Х	Х
Crooked line 2D/3D binning		Х	Х
Trace editing			
Resample	Х	Х	Х
Kill trace	Х	Х	Х
Zero-padding	Х	Х	Х
Inverse	Х	Х	Х
Muting	Х	Х	Х
Trace length change	Х	Х	Х
Header fields manipulations			
Mathematical operations	Х	Х	Х
Spreadsheet editor	Х	Х	Х
Import from ASCII files, export to ASCII	Х	Х	Х
Smoothing average	Х	Х	Х
Shift of header values to specified number of traces	Х	Х	Х
Header enumerator	Х	Х	Х
Header NMO/NMI	Х	Х	Х
Surface-consistent calibration (e.g. for static shifts or amplitude values)		Х	Х
Graphs	Х	X	X
Cross-plots and histograms		Х	Х
Dataset combining	X	N/	N
Trace-by-trace subtraction/addition of 2 datasets	Х	X	X
Vertical merge of 2 datasets along a horizon		Х	Х
Amplitudes			
Amplitude corrections: linear (spherical divergence), exponential, automatic gain control (AGC), trace equalization, time-variant gain	Х	Х	Х
AGC removal	х	х	х
Ensemble equalization	X	X	X
DC removal	X	X	x
Statics	A	Λ	~
Elevation statics calculation	Х	х	Х
Residual statics calculation		x	x
Maximum power autostatics		X	X
Correlation statics calculation		X	x
Apply statics	Х	X	X

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Super gathers X X   Velocity manipulation X X				
Velocity manipulation X X				
		Х		
Interactive analysis of stacking velocities X X X				
	Interactive analysis of stacking velocities	Х	X	X

Horizon-based velocity analysis		Х	X
NMO/NMI-correction	Х	X	X
Stacking	Х	Х	Х
Offshore data processing			
Marine geometry assignment	Х	Х	Х
Import geometry from UKOOA P1-90 files		Х	Х
Dropped/missed shots correction	Х	Х	Х
Import tidal statics		Х	Х
HiRes marine statics calculation		Х	Х
De-bubbling deconvolution		X	X
2D SRME		X	X
Near-offset marine data demultiple		X	X
SharpSeis <sup>™</sup> adaptive deghosting/broadband processing		Х	X
QC and attribute analysis			
Pre-stack shot/receiver gather QC: estimation of mean, 2D RMS and mean 1D			
RMS amplitude, signal-to-noise ratio, resolution and apparent frequency pre-		Х	X
stack within an arbitrary polygon or a rectangular window			
Fold and offset sampling calculation		Х	Х
Survey, fold and offset sampling maps		Х	X
Analysis of attribute dependency on linked cross-plots and histograms		Х	Х
Mapping attributes on top of topography background		Х	Х
Estimate of average, RMS, minimum, maximum, absolute maximum amplitude			
post-stack within a window along a horizon		X	X
Determination of time of maximum, minimum, and absolute maximum			
amplitude post-stack within a window along a horizon		Х	Х
Estimate of peak frequency, apparent frequency, visible frequency, centroid			
frequency, and frequency		Х	Х
		V	N
bandwidth post-stack within a window along a horizon		X	X
Estimation of signal-to-noise ratio post-stack along a horizon		X	X
Computation of auto-correlation and cross-correlation functions	Х		
Interactive estimate of velocities of all types of waves	Х		
Reflection strength, instantaneous frequency, instantaneous phase		Х	Х
Offshore real-time QC			
Real-time SEG-D input			Х
Parallel execution of QC flows			Х
Shot QC			Х
Automated first-break picking			Х
Near-trace gather QC			X
Real-time 2D CDP stack			X
			X
RMS amplitude map			
Frequency map			X
SNR map			X
Attribute and header plots			X
Bubble pick time/amplitude and bubble period maps			X
Towing depths control based on spectrum notches			X
Saving all QC results to project DB			Х
Refraction			
Processing time-curves of refracted waves (plus-minus and GRM)	Х	Х	Х
First-break travel-time tomography	Х	Х	Х
Vibroseis			
Correlation	Х	Х	Х
Surface Wave Analysis			
Multichannel Analysis of Surface Wave (MASW)	х	Х	Х
VSP	~	A	X
		х	х
VSP geometry assignment for vertical or inclined wells			
Hodogram analysis, 2C and 3C rotation		X	X
Generation of synthetic seismograms for different wave types		Х	X
Separation of wavefields of different wave types		Х	Х
Calculation of arrival time of direct wave or reflected wave from a specified			
Calculation of arrival time of direct wave or reflected wave from a specified reflector for horizontal layered model		x x	x
Calculation of arrival time of direct wave or reflected wave from a specified			
Calculation of arrival time of direct wave or reflected wave from a specified reflector for horizontal layered model		х	x
Calculation of arrival time of direct wave or reflected wave from a specified reflector for horizontal layered model Layer velocity modeling		X X	x x
Calculation of arrival time of direct wave or reflected wave from a specified reflector for horizontal layered model Layer velocity modeling Estimation of Q		x x x x	X X X
Calculation of arrival time of direct wave or reflected wave from a specified reflector for horizontal layered model Layer velocity modeling Estimation of Q Far-offset VSP NMO-correction		X X X X	x x x x x

VSP Kirchhoff migration		Х	Х
VSP-CDP transformation		Х	Х
Display and printing			
Various modes of data display	Х	Х	Х
Display of WT/VA traces on top of color-coded velocity or seismic data	Х	Х	Х
Support of several data displays at a time, several datasets in one display	Х	Х	Х
Synchronized scale, scroll and gain in several display windows for data comparison	x	x	x
Interactive calculation of frequency spectrum and F-K spectrum of arbitrary data fragment	х	x	x
Display of several spectrum graphs in one window	Х	Х	Х
Display of trace header fields	Х	Х	Х
Display of lines, attributes, horizons, on the interactive map	Х	Х	Х
Interactive display of data along an arbitrary line selected on the Map	Х	Х	X
Display of attributes on linked cross-plots and histograms		Х	Х
Printing and export of cross-plots and histograms to a bitmap		Х	Х
Printing of processing results with print preview	Х	Х	X
3D display			
3D volume display		Х	Х
Data and processing management			
Processing within projects. A project can be easily moved to a new location	х	х	x
together with all associated data and processing parameters	~	X	X
Work with several projects at a time	Х	Х	Х
Processing flows can be combined into several queues and run in parallel	Х	Х	Х
Processing flows can be copied with all procedures and parameters	Х	Х	X
Export/import of processing flows	Х	Х	X
Export/import of datasets in RadExPro data exchange format	Х	Х	Х
Processing history	Х	Х	Х
Data run-time resorting on input into the flow	Х	Х	Х
Fast resorting of big data volumes		Х	Х
Combining several flows into processing queue, parallel execution of several queues		x	х
Batch processing of a number of files with the same flow		х	Х
Interpretation			
Horizon picking, manual and automatic	Х	Х	х
Gridding of horizons and attributes	Х	Х	Х
Attribute calculation along horizons		х	X

\*Technical specification is for information only and is subject to change without prior notice.

## **Recommended Minimal System Requirements:**

Intel Core i-5 CPU 4 Gb RAM OS Windows Vista/7/8/10



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