

# PDS Multibeam

## a Teledyne PDS Application

Tedyne PDS Multibeam Application is an acquisition, processing and modelling package built with your end product-deliverable in mind.

Widely used by companies around the globe on a broad range of hydrographic projects, PDS has a strong following among port and harbor authorities and dredging contractors. Its advanced functionality also adds real value for offshore operations in the energy sector by reducing processing time and eliminating laborious manual tasks.

PDS is developed to support **Teledyne RESON's** market leading brand multibeam echo sounders **from Acquisition to Charting**, PDS also supports third party brands ensuring commonality of software systems & processes across your fleet.

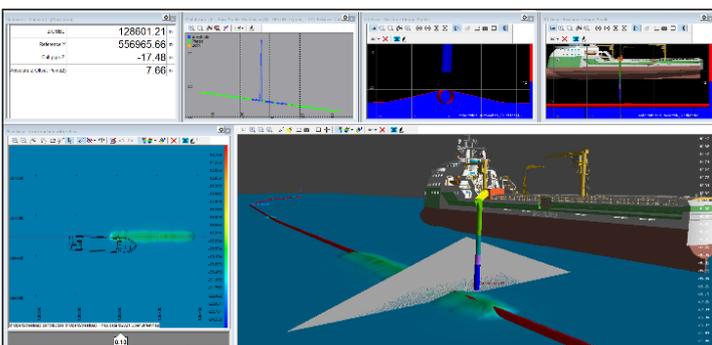
In addition to charting PDS is a powerful tool for construction modeling for which PDS has an outstanding reputation.

### On the fly filtering including TPU filter

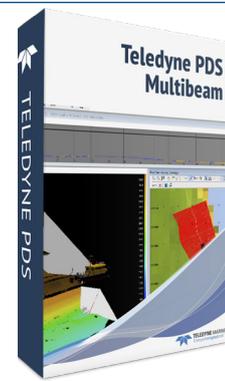
A single file structure ensures that all raw data is collected and accessible at each stage of the process and as PDS flags filtered data this means you can review the processed data and make changes at any stage or even undo processing steps quickly. As all data is synchronized, PDS allows you to identify, offset or latency errors that other software has difficulty identifying. By showing the different sensor data in a time-series, PDS supports QC tools such as 3D views, TPU profile, QC views and others to ensure that your data as collected is of the quality you expect. The real-time TPU value is calculated for each bin and can be viewed as colors or used as filter settings which can be applied real time during Multibeam data acquisition providing real time automated cleaning.

### Data processing

The PDS 3D editing module combines MB and laser calibration (where applicable) with editing of 3D swath and sound velocity profile, DTM and CUBE modeling/editing and also water column visualization. Combining these in a single package will save you and your projects valuable time.



Example of the flexibility of PDS is using a Multibeam system on an stone dump vessel with fallpipe or a Motionscan solution on your barge



### Quick clean

Quick clean of your MBES data uses the PDS DTM filter and beam filter where you generate a DTM then filter / edit the DTM and clean your point cloud using the beam filter with the DTM as reference. That way data sets are cleaned in minutes saving further valuable time.

While doing the final touch cleaning on your swath data, your CUBE and DTM models are updated on the fly and the processor immediately sees the results of his work. When more elaborate data processing is required then PDS files can be easily imported into the **Teledyne Caris** package without the need for conversion.

### Automatic pipeline(s) detection.

The pipeline/cable detection module in PDS may be used to automatically detect and track pipes and cables, display them in 3D and store the surveyed route as xyz route file. Where used with the **Teledyne RESON SeaBat** series of MBES PDS you further benefit from FlexMode which optimizes coverage over the flowline or cable. Where as-laid route is known this information may even be used by PDS to proactively steer the **SeaBat's** FlexMode sector towards the product even where buried so that when the pipe/cable comes visible the tracking starts directly without operator intervention.

### Charting

The chart module offers the operator quick plot results. Convenient templates ensure progress plots are generated in just minutes by simply by replacing the DTM with the latest version.

Fast and accurate data production has never been so simple.

## PRODUCT BENEFITS

- All-in-one Hydrographic survey package
- Easy to upgrade to meet special projects demands
- Strong technical support via helpdesk and agents
- A Teledyne product that combines all our strengths



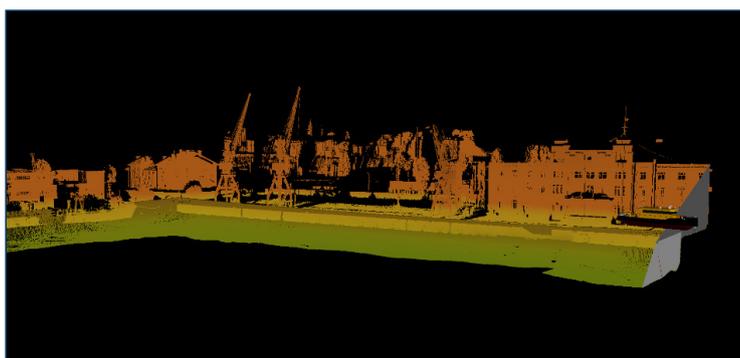
**TELEDYNE MARINE**  
PDS  
Everywhereyoulook™



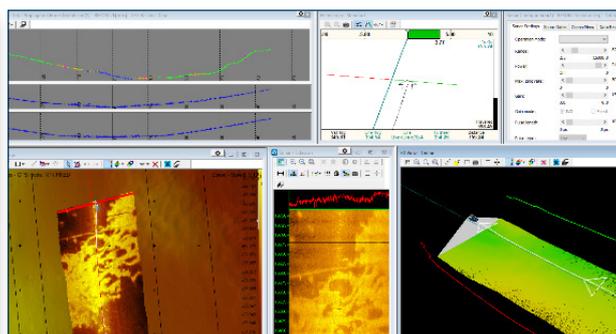
# PDS Multibeam a Teledyne PDS Application

## PDS MULTIBEAM SPECIFICATIONS

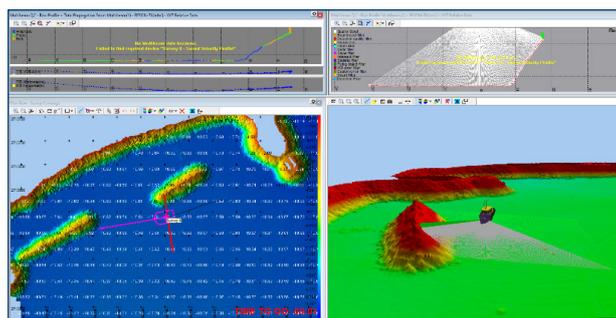
PDS	Data acquisition and processing	Data acquisition	Data processing
Project management	√	√	√
User accounts + User access levels	√	√	√
Multiple (remote) Presentations	√	√	√
Track guidance editor	√	√	√
GeoCalculator	√	√	√
Data acquisition echosounder	√	√	-
E20 control and graphics	√	√	√
SSS acquisition \ playback	√	√	√
Video camera recording	√	√	-
Tide gauges and Editor	√	√	√
Magnetometer	√	√	√
Autopilot Output	√	√	-
USBL + USBL calibration	0	0	0
Multivessel / ROV	0	0	0
C-map, S-57 and S63	√	√	√
Webmap service	√	√	√
Timebased editor, Linebased editor	√	-	√
Position editor, Tidal editor	√	-	√
3D MBES Editor/SVP editor	√	-	√
MBES /Laser / Calibration	√	√	√
Volume computation with reporting	√	-	√
Export utility of data	√	-	√
Plotmodule	√	-	√
Quick profile plot	√	-	√
Batch Plot	√	-	√
Quick profile plot	√	-	√
Batch Plot	√	-	√



Survey with both Multibeam and laser scanner combined



View with Snippet/Side Scan Sonar and TPU



Survey with T20 Multibeam



**TELEDYNE MARINE**  
PDS  
Everywhereyoulook™

[www.teledynemarine.com/pds](http://www.teledynemarine.com/pds)

Tel. +31 (0)10 245 15 00 (Europe) • Tel: +1 805 964 6260 (USA)

Email: [pds@teledyne.com](mailto:pds@teledyne.com)