



# CYGNUS UNDERWATER ULTRASONIC THICKNESS GAUGE



The Cygnus Underwater is the original diver-held subsea Multiple-Echo ultrasonic thickness gauge. It was designed for use by divers undertaking subsea maintenance and surveys 3 decades ago... and today it is still an industry standard.

IDEAL FOR  
USE IN



HULL UTM  
INSPECTION



CIVIL  
ENGINEERING



MARINE  
STRUCTURES



OFFSHORE  
PLATFORMS

...underwater structures, e.g. bridges, tanks, canal locks, subsea pipelines and equipment, UWILD or IWS class surveys.



## CYGNUS UNDERWATER KEY FEATURES



- **Multiple-Echo mode for accurate, through-coat measurements as specified by Classification Societies**
- **Deep Coat mode ignores coatings up to 20mm/0.79in. thick (upon request)**
- Heavy duty sealed unit with double 'O' ring protection
- Rugged, durable, shock-proof construction
- Easy & stable calibration - no zero adjustment
- Echo strength indicator to aid measurement
- Two rechargeable battery packs with charger
- Auto-Probe Recognition (APR)
- Topside Repeater options:
  - Option A - Palm-held Topside Repeater (TSR)
  - Option B - CygLink software (Windows based) for data logging and remote display



**BRIGHT LED  
DISPLAY** FOR  
POOR  
VISIBILITY



**DEPTH  
RATED**  
TO 300M /  
984FT



**CYGLINK  
SOFTWARE**  
OPTION



**TOPSIDE  
REPEATER**  
OPTION

## BENEFITS OF MULTIPLE-ECHO

- Measures remaining metal thickness on corroded and coated structures
- All measurements are error checked using 3 return echoes to give repeatable, reliable results
- Accepted by all major classification societies
- Greatly reduces inspection time and costs
- Echo strength indicator to aid measurement.



**GO TO  
PRODUCT  
PAGE**

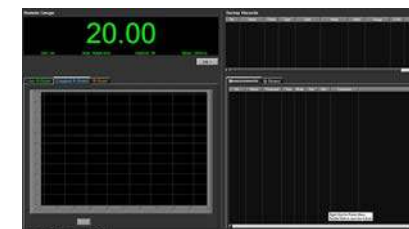
## OPTIONS AND ACCESSORIES

### Topside Repeater Remote Display Unit

The Cygnus Topside Repeater is a remote display unit connected to the gauge with an umbilical cable. It displays the thickness measurements at the surface in real-time during the survey.

### CygLink Computer Software

CygLink is a Windows® based application used to display, log and transfer thickness measurements at the surface. The software can generate PDF reports and export to CSV files, allowing for after-the-event analysis of logged measurements. Designed for Windows 7 and above.



## CYGNUS UNDERWATER SPECIFICATION

| Feature                           | Description                                                                                                                                  |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Materials</b>                  | Velocities between 2000 m/s and 7000 m/s (0.0800 in/us to 0.2780 in/us) - covers virtually all common engineering materials                  |
| <b>Measurement Range in Steel</b> | 1mm - 250mm (0.040" - 10.000") depending on selected probe and configuration, material and temperature                                       |
| <b>Accuracy</b>                   | ±0.1 mm or 0.1% of thickness measurement, whichever is greatest, when calibrated in accordance with Cygnus Instruments calibration procedure |
| <b>Resolution</b>                 | 0.1 mm or 0.05 mm (selectable) (0.005" or 0.002")                                                                                            |
| <b>Probe Options</b>              | Single crystal probes                                                                                                                        |
| <b>Power</b>                      | 2 x rechargeable NiMH battery packs                                                                                                          |
| <b>Battery Life</b>               | 2 x 20 hours continuous measuring (with fully charged battery packs)                                                                         |
| <b>Display</b>                    | Large, bright LED display                                                                                                                    |
| <b>Size</b>                       | 238mm long x 85mm diameter (9.4in x 3.4in)<br>Including battery pack and probe head                                                          |
| <b>Weight</b>                     | 977g (35 oz) Including batteries                                                                                                             |
| <b>Operating Temp.</b>            | -10°C to +50°C (14°F to 122°F)                                                                                                               |
| <b>Environmental Protection</b>   | IP68 continuous 300m (984 ft) rating                                                                                                         |
| <b>Standards</b>                  | Designed for EN 15317                                                                                                                        |
| <b>Compliance</b>                 | CE, UKCA, RoHS                                                                                                                               |



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ISS6 03/21

*All information provided is subject to change without prior notice.*

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