



UAN - Subsurface Telemetry Unit (STU)

F. Zabel, fredz@wireless.com.pt

C. Martins, cvmartins@ualg.pt

A. Silva asilva@ualg.pt

SiPLAB - FCT, University of Algarve
Campus de Gambelas,
PT-8005-139 Faro, Portugal

Comments: download file ([cintal_rep](#))

Ref.: SiPLAB Report 03/10, FCT, University of Algarve, 2010.

Abstract: This document describes an underwater acoustic data acquisition system, made of a subsurface telemetry unit (STU), an underwater array of acoustic and non acoustic sensors and a cable connected base station (BS). The telemetry unit includes a digital storage unit for the acquired data, a communications system through a fibre optic data and a power link to a nearby vessel or shore. Acquired data can be streamed in real time to the base station where storage and/or processing can occur. A user manual is included as well as installation, setup and maintenance guide for the system and its practical applications. The developed hardware and software is described in detail. Detailed schematics and drawings can be found in the final section of this document, which can be used to develop the system, perform maintenance, purchase spare parts or perform any type of modifications.

ACKNOWLEDGMENT: this work was supported by project UAN (Underwater Acoustic Network) from the European Community's Seventh Framework Programme (FP7/2007-2013) under Grant Agreement # 225669.