

Development of a low-power wet-pluggable interface for easy integration of analog sensors to autonomous platforms

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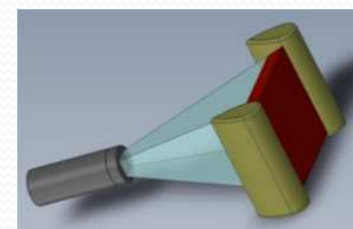


This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 635359



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- 19 public and private partners
- From 9 (EU) countries
- CSCS is work package 3 (Standardization) leader
- Several sensor payloads
 - Water column habitats
 - Hydrographics
 - Climate change
 - Oil and Gas
- Turner Cyclops Fluorescence and Turbidity
 - Chlorophyll
 - CDOM
 - Turbidity
 - Crude Oil
 - Refined Fuels

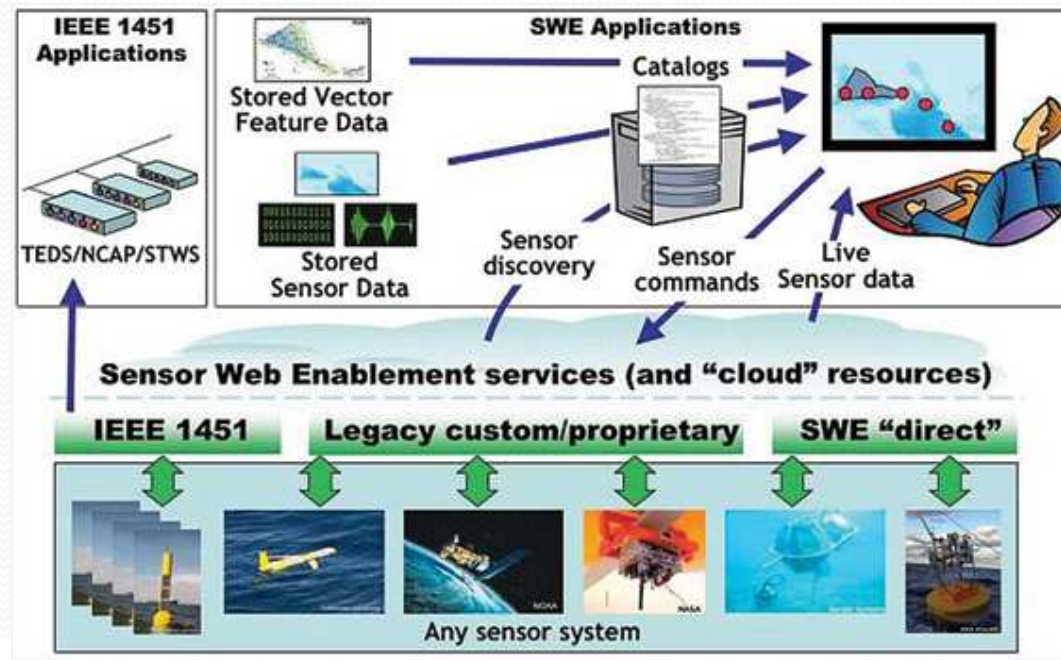


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Data Standardization

- Many recent efforts such as GROOM and EGO
- Sensor Web Enablement from Open Geospatial Consortium (OGC)
- It's too late to try to standardize at raw data level



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PUCK Protocol

- Developed by Monterey Bay Aquarium Research Institute (MBARI)
- Augments the instrument's firmware with metadata
- Provides a way to store and retrieve information from instrument
- Takes care of manual installation and configuration



Interface

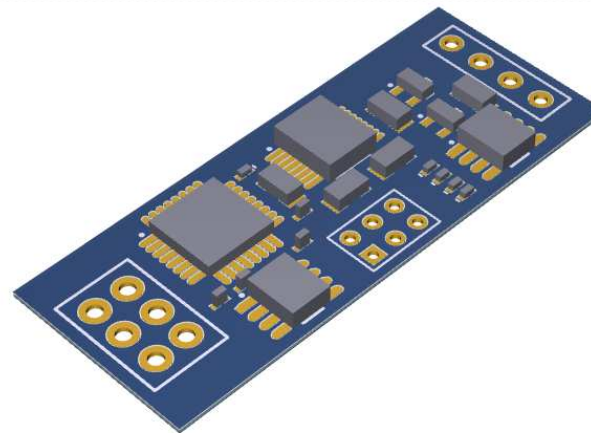
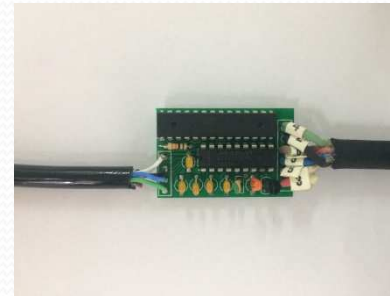


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Current Developments

- PUCK enabled
- Low Power Consumption <100mW
- Embedded into cable assembly
- Auto gain setting
- Operation Modes
 - Polled
 - Interval
- ASCII NME-0183 data format
 - \$CYAAA,1111,222,3
- Facilitates calibration procedure



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Thank You!



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