# The OGC PUCK Standard

The OGC PUCK standard enables automatic configuration of geolocated sensor networks.

The idea behind PUCK is simple: Provide a standard way for an instrument to describe itself to the observing system, so when the instrument is plugged in, sampling can begin.

Features

- Self-describing serial and Ethernet instrumentation
- *Plug and Work* - automated configuration
- Observing system interoperability, scalability

> **PUCK**
>
> Making Plug and Work **possible**
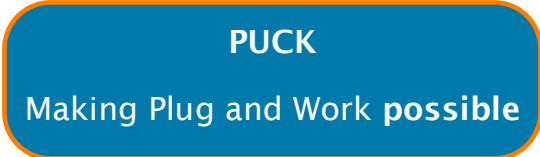
PUCK Concepts

PUCK *datasheet* — Standard fixed-content instrument description, including universally unique serial number (UUID), instrument manufacturer and model

PUCK *payload* — Optional user-defined information used by observing systems to configure and use an instrument. Instruments may carry zero or more PUCK payloads

PUCK *protocol* — Systems use simple PUCK protocol to read and write PUCK payloads and to access the PUCK datasheet information

The Value of PUCK

For Users

Plug and Work
- Sensors are easier to set up and use. A big advantage in challenging physical environments!
- Integration of diverse sensors takes less time and effort.
- Compatibility with the OGC's open SWE standards and IEEE 1451 Smart Sensor standards makes it easier to publish, discover, assess, access, control and use geolocated sensors in large Internet-based sensor networks.

For Manufacturers

Deliver more to customers at little or no cost:
- Automatic configuration
- Interoperability
- Choice of standards
- Endorsed by Smart Ocean Sensors Consortium
- An international standard maintained by the OGC Open, royalty-free license
- Free reference implementations simplify development

Business development support
- The OGC promotes SWE standards, including PUCK, in diverse sensor markets.

Commercial PUCK Implementations

Several oceanographic manufacturers now sell PUCK-enabled products, implemented using a reference design available at no cost from the MBARI Plug and Work website.

Learn More

PUCK at Open Geospatial Consortium — http://www.opengeospatial.org/projects/groups/puck1.0swg

Smart Ocean Sensors Consortium (SOSC) — https://sites.google.com/site/soscsite

Try it! - PUCK Reference Design Kit — http://www.mbari.org/pw/devtoolkit.htm