



## Telonics Model TCU-210 Argos Transmitter for Cetacean Research



Housing Dimensions: 6.0" (+ 1.5" interface) length x 1.0" outside diameter.  
Weight: approximately 150 grams. Transmission power level 0.5 watt.

The electronics and power system are housed in a high impact polycarbonate housing. The saltwater switch contacts are mounted on either side of the antenna. The unit is able to detect surfacing within 300 milliseconds and initiate an Argos transmission. The unit is produced in the fully cast form with the CAST 7 option. This option is designed to withstand pressures of greater than 1000 meters. A stout 1.5 inch section of polycarbonate material is provided at the bottom end of the unit for installation of user provided attachment hardware. The user must also interface and test this unit with their delivery system.

### Background Information on Telemetry for Cetaceans

Instrumentation of cetaceans is a complex exercise requiring coordination of numerous facets of telemetry technology. In most instances, whales are not physically handled or restrained. When researchers are instrumenting free ranging unrestrained animals, they must often be instrumented during brief surfacing intervals using remote deployment techniques that vary widely depending upon species under study and pursuit craft, i.e., native craft, zodiacs, ocean kayaks, small mobile motor boats, and even helicopters. Most researcher who have been successful at instrumenting free ranging whales have developed techniques specific to the species under study, the region of the world where they will be working, the research funds available for the instrumentation effort and other factors that are involved in this complex operation. Most cetacean researchers have developed their own deployment systems for working on specific species. Typically the instrumentation package is integrated into a projectile that must be launched or fired from the delivery device. The delivery device or system can often be a crossbow or modified firearm. These delivery systems are developed by individual researchers and are not supplied to the community through Telonics or any other telemetry manufacturer.

