



ENGINEERING BULLETIN

Bulletin Number: 11-001

Date: February 15, 2011

Engineering Change: Change in WaterLOG® Self Contained Bubbler System Specifications Requires Different Capacity Fuse

Regions Affected: All Regions

Systems Affected: Fused WaterLOG® H-355 and H-3551
Self Contained Bubbler Systems

Originator: Caleb Gostnell, Lead Physical Scientist
Caleb.Gostnell@noaa.gov

MSCS Approval: 24 February 2011

Background/History:

Design Analysis recently discontinued production the WaterLOG® H-355 self contained bubbler system (i.e., pump) and replaced it with the H-3551. The new H-3551 unit provides the same functionality as the older H-355 but has a more powerful compressor which has a higher instantaneous power draw when starting up so, if fused, requires a 10A power-supply fuse as opposed to the 5A fuse used by the older H-355 units (some units are fused and some are not; this Bulletin affects only fused units which are primarily found on the west coast and throughout Alaska and the Pacific Islands).

The new H-3551 has SDI-12 communications installed standard which saves a little on the overall cost but the difference in fuse rating means that we will need to keep track of what model we have where. Although the instantaneous power draw of the new pump is a bit higher the overall power consumption of the unit remains about the same and is quite low at ~ 15mA/day.

The Instrument Labs have a small inventory of H-355 pumps and will issue those first but since they have been superseded by the H-3551 field crews will likely be issued the new style units for installation sometime during the FY11 field season.

Action:

When a new style H-3551 pump is installed field crews should make a note in the E-Site report, and, for pumps that are fused, install a 10A fuse in the appropriate pump power-supply fuse-holder and place a label on the affected fuse-holder and the face of the pump indicating that a 10A fuse is installed. Pumps requiring a 10A fuse can be identified by the following physical features:

- Part number H-3551 instead of H-355
- Compressor is black instead of silver
- Internal circuit board is physically smaller than in the H-355

No changes are required for the older style H-355 pumps.

If you have any questions or concerns regarding this Engineering Bulletin please contact the Measurement Systems Configuration Subcommittee at MSCS@noaa.gov.

References:

- [ROS 6.1.4c E-Site Report – User's Guide](#)
- [ROS 3.2.3.5 \(E1\) Standing Project Instructions for Coastal and Great Lakes Water Level Stations](#)
- [ROS 4.3.1.6 \(F1-1\) WaterLOG H-3551 Owner's Manual, Version 3.0](#)

