MMP Deployment Definition Parameters

Quick Reference

Mooring ID: Three position numeric identifier (001 to 999) sent with UIM metadata (stored with deployment data in the URAO). Differentiates data if more than one MMP is deployed.

Countdown delay: The MMP wakes from 'sleep' when the countdown alarm reaches zero. If the transponder is installed, the countdown begins when the firmware pings the transponder and profile 0 begins when the countdown reaches zero (one to two minutes after confirming deployment). *Range: 0 seconds to 24 hours in 1 second increments.*

OR

Scheduled start: Scheduled start is an absolute date and time. Profile 0 begins when the RTC reaches the specified time. *Range: Years 1970 to 2038 in 1 second increments and at least 10 minutes in the future as measured by the RTC.*

Profile start interval/Pair start interval: Interval between profiles or profile pairs measured between the start of profiling motion of sequential profiles or pairs of profiles. Continuous profiling results from a 0 setting. *Range: 0 seconds to 366 days in 1 second increments.*

Reference date/time: Initial reference time for the deployment (start of Profile 1). Subsequent profiles reference this time. *Range: Years 1970 to 2038 in 1 second increments.*

Burst interval: Interval between profile bursts or profile pairs. Continuous bursts are selected by setting the burst interval to 0. *Range: 0 seconds to 366 days in 1 second increments.*

Profiles per burst/ Pairs per burst: The number of profiles or pairs of profiles in a burst. Setting this to 1 disables burst profiling. *Range: 1 – 1000 profiles or pairs of profiles.*

Paired profiles: Enables or disables paired profiles. When paired profiles are enabled, the deployment is scheduled in up-down pairs. *Range: Enabled/Disabled.*

Profiles/file set: Profiles stored on the flash card as a single data file. Example: '10' places profiles 1 through 10 into a single data file on the flash card. (Unpacker produces 1 file per profile when the raw data is processed from the flash card).

Shallow pressure: "Top" of the profiling range. The MMP stops profiling on an upward profile when the ambient pressure drops below this limit. *Range: 0.0 dbar to Deep pressure.*

Deep pressure: "Bottom" of the profiling range. The MMP stops profiling on a downward profile when the ambient pressure exceeds this limit. *Range: Shallow pressure to 6000.0 dbar.*

Shallow error: A relative pressure below (deeper than) the shallow pressure stop. If a zero pressure rate is detected while inside the shallow error window on an upward profile, profiling stops. This value is relative to the shallow pressure. *Range: 0.0 dbar to 6000.0 dbar.*

Deep error: A relative pressure above (more shallow than) the deep pressure stop. If a zero pressure rate is detected while inside the deep error window on a downward profile, profiling stops. This value is relative to the deep pressure. *Range: 0.0 dbar to 6000.0 dbar.*

Profile time limit: Maximum time for profiler motion. If the time limit expires while profiling, the MMP stops. Calculation: profile time limit = 1.25 × (deep pressure - shallow pressure) / nominal profiling speed. *Range: 10 seconds to 8 hours in 1 second increments.*

Stop check interval: Frequency to check ambient pressure, pressure rate, elapsed time, battery voltage and motor current. *Range: 1 second to 60 seconds in 1 second increments.*

Fluorometer: If the fluorometer is enabled, this option can be used to change the gain and the average number of samples to record.

OBS Turbidity: If the turbidity is enabled, this option can be used to change the gain and the average number of samples to record.

Power for a single profile: Single profile battery drain is one of the components of the battery endurance estimate.

Total profiles/ (240 Ah): Total estimated profiles based on battery energy (the L24-1000 battery has 240Ah). Battery energy can be changed in the System Configuration menu).

Est battery expiration: Estimated battery expiration. Estimate basis: battery energy, single profile drain, and total profile number (estimate adjusts as deployment parameters change).

Verify and proceed: Selecting 'V' instructs the firmware to conduct parameter range and consistency checks and perform the endurance calculation but does not start the deployment.