

With regards to the GPS100, what is a warm start?

When the GPS100 is started or powered up, it attempts to get a position fix in one of three modes,

- hot start (typically acquires a fix in 8 seconds),
- warm start (typically acquires a fix in 38 seconds), or
- cold start (typically acquires a fix in 45 seconds or more).

The GPS100 enters one of these startup modes based on several factors including the last position and time fix, (which was saved the last time the GPS100 was powered down), almanac data containing general satellite orbit data (also saved the last time the GPS100 was powered down), and ephemeris data containing precision corrections to the almanac data (also saved the last time the GPS100 was powered down but only valid for 2 to 6 hours). The GPS100 will enter the warm start mode if the time is valid (battery hasn't discharged so far that the clock stopped), and the almanac data is valid (the GPS100 hasn't been reset), the predicted satellites are seen overhead by the receiver (GPS100 has not been moved a significant distance nor is the GPS100 obstructed and the signal is strong), and the ephemeris data is no longer valid (more than 2 to 6 hours has elapsed since the last fix).

Online URL:

<https://www.maretron.com/wp-content/phpkbv96/article.php?id=154>