Hardware Limitation of Trimble NetR5 and NetR8 GNSS Receivers

496 Freddy Blume November 23, 2015 Trimble NetR5, Trimble NetR8 4125

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The Trimble NetR5 and NetR8 receivers are limited to tracking 3 pseudorange (code) channels per satellite at a time. This means for SV's that support L5, when L5 is disabled, L1 C/A, L2P, AND L2C may be tracked/logged, but if L5 is enabled, L1 C/A, L2P *or* L2C, and L5 are tracked/logged, depending on settings. In the latter case the user must choose which L2 pseudorange to track/log. This limitation will affect how users will be able to implement tracking of the new L1C code which will be included in Block III SV's scheduled for deployment in 2013.

As with previous Trimble receivers, the NetR8 only tracks one L1 pseudorange: if anti-spoofing is enabled by the DoD the C/A code is tracked, otherwise L1P is tracked. This is not user-configurable. Anti-spoofing has been and will be enabled for the recent and foreseeable future.

Carrier phase tracking is not affected - L1, L2, and L5 GPS phases are tracked and logged as would be expected.

The Trimble NetR9 GNSS receiver is NOT subject to this limitation, although GPS L1 tracking behavior is unchanged from the NetR8.

Online URL:
https://kb.unavco.org/article/hardware-limitation-of-trimble-netr5-and-netr8-gnss-receivers-496.html