

## OEM7 MSM Messages Issue

### Issue Summary:

An issue has been found on OEM7 receivers using channel configuration #5 with GPS or Galileo signals or using channel configurations #4 or #5 with BeiDou signals, while generating RTCM MSM messages. The receiver behaviour will manifest itself as an unexpected receiver reset or incorrect data in the MSM messages. This issue is seen when one of the following conditions occur:

- The receiver tracks GPS L1C with more than 12 tracked GPS satellites
- The receiver tracks Galileo E6 with more than 12 tracked Galileo satellites
- The receiver tracks BeiDou B3 with more than 21 tracked BeiDou satellites

### Products Affected:

All OEM7 based products with firmware versions up to and including 7.07.04, using Channel configuration #4 or #5 on models xFx-xxx-xBx (multi frequency, outputting corrections data).

### Mitigation:

To recover from the issue, the receiver channel configuration can be changed to channel configuration #1, #2 or #3 using the SELECTCHANCONFIG command. The command details can be found on:

<https://docs.novatel.com/OEM7/Content/Commands/SELECTCHANCONFIG.htm>

Alternatively:

All OEM7 customers should load the 7.07.03S10 (OM7MR0703SN0010) version onto their receivers, available in the link below:

[OM7MR0703SN0010](#)

All PwrPak7 customers should the 7.07.04S2 (EP7PR0704SN0002) version onto their units, available in the link below:

[EP7PR0704SN0002](#)