

Apogee Series

Product Change Notice

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PCN: New Apogee-D internal GNSS receiver

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This notice is to inform you about an Apogee-D hardware update.

1. Description of change

In order to keep our Apogee-D on the edge of performance and to be more competitive for our customers, we have updated the internal GNSS receiver inside the Apogee-D for a more powerful and featured model.

The new model is triple band enabled (L1/L2/L5) and tracks most constellations and signals.

2. Impact of change

SBG Systems has taken all actions to ensure a smooth transition for all users.

New hardware revision is 100% form and fit compatible. Function is compatible as well for most users but some advanced features might be slightly different from previous units. Changes are listed below. Other specification and performance parameters remain the same.

New hardware revision is rev. 3

2.1. Change of product mass

Mass of the product increases from 865 g to 899 g thus remaining under the specified 900 g limit for this product.

2.2. Overall power consumption

The typical power consumption decreases from 7 W to 6 W when using all constellations and signals.

2.3. New receiver specifications

	Specification	Remark
Channels	544	
Signal tracking	GPS: L1 C/A, L2, L2C, L5 GLONASS: L1 C/A, L2 C/A, L2P, L3 GALILEO: E1, E5a, E5b Beidou: B1I, B1C, B2a, B2I, B3I	QZSS: L1 C/A, L2C, L5 SBAS All constellations & signals enabled by default
Horizontal position accuracy	Single Point L1/L2/L5 SBAS / DGNSS RTK PPP (MARINESTAR™)	1.2 m 0.6 m / 0.4 m 0.6 cm + 0.5 ppm 10 cm RTK enabled by default
Velocity Accuracy	0.03 m/s RMS	
True Heading Accuracy	0.15° 0.03°	1 m baseline 5 m baseline
Velocity limit	515 m/s	Due to export licenses
Time to First Fix	Cold start	< 45 s
	Hot start	< 20 s
Signal reacquisition	L1/L2/L5	< 1 s
Output frequency	PVT: 5 Hz (Max 20 Hz) RAW data: 1 Hz (Max 100 Hz)	
Diff. Corrections	RTCM V2.x, V3.x CMR V2.0, CMR+	

2.4. Antennas requirements

- The allowed antenna gain at Apogee-D input is reduced from 15-50 dB to 15-45 dB.
- The requirement of max current that Apogee-D can provide to LNA changes from 200 mA to 150 mA per antenna.
- Full benefit of new band plan requires adapted antennas matching the new constellations and signal bands. Antenna models recommended by SBG Systems for the previous hardware revision remains fully compatible.

3. New commercial offer

3.1. Old product code & part numbers equivalence table

The product part numbers are replaced as described in the following table.

P/N	Product Name	Hardware rev.	New P/N	New Product Name	Hardware rev.
100-2211	APOGEE-D Marine INS - GNSS RTK	2	100-2896	APOGEE-D Marine INS - GNSS RTK	3
100-2213	APOGEE-D Land Air INS - GNSS RTK	2	100-2897	APOGEE-D Land Air INS - GNSS RTK	3

3.2. Hardware revision 2 EOL announcement

Depending on product variant, we may not have any more stock of the previous hardware revision. Please contact your sales representative if you need to purchase rev 2 hardware.



Note: This EOL has a short notice, as the new hardware is fully compatible with the previous one and therefore does not require specific re-qualification.

- Last buy order for rev. 2 hardware will be at November 30th 2022. Depending on orders volume, standard lead time for rev 2. could be increased resulting in deliveries delayed at end of April 2023. Note that despite SBG Systems best efforts, following supply chain constraints, rev 2. part numbers may be in shortage before that date.
- Last shipment for rev. 2 hardware will be at May 31th 2023
- End of support for rev. 2 hardware will be at May 31th 2025

3.3. New hardware revision availability

The new hardware is available to order with deliveries starting at end of January 2023.

4. Sales contact

If you need any further information after reading this document, please contact us by email or phone.

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