



# Cloud Cap Technology DGPS FlightPak

## Aircraft GNSS receiver

Piccolo autopilots support RTK carrier phase DGPS enhanced flight operations. The addition of the NovAtel RTK DGPS feature to Piccolo autopilots and ground station enables precision flight capabilities such as autonomous rolling take-offs and landings, net captures, and situations requiring precision meta data (i.e., mapping with a gimbal mounted camera).

The DGPS FlightPak from Cloud Cap Technology is an integrated unit that contains the dual-frequency NovAtel OEM615 DGPS and provides a robust case, power regulation, and antenna/communication connections for easy integration into a multitude of airframes.

### Key Features

Enhances Piccolo system navigation, supports precision flight capabilities such as moving baseline capture

High degree of accuracy. Single unit absolute position accuracy is 1.2m RMS. Relative position accuracy using two units is centimeter level.

Two units can easily be combined to generate precise positioning and heading information using the NovAtel ALIGN<sup>3</sup> firmware

Small and lightweight, simple to integrate

Compatible with all Piccolo autopilots



**UTC Aerospace Systems**

**Mechanical and Electrical**

Size: 95 x 52 x 25 mm (3.7 x 2.05 x 0.97 inches)

Weight: 85 grams (3 oz)

Operating Temperature: -40°C to +80°C

Vin: 5 – 30 VDC

Power: 2W (typical)

**Communication Ports**

Main Connector: DSUB-15

Antenna Input: SMA female

3 RS-232: up to 250 kbps

1 CAN Bus<sup>1</sup>: 1 Mbps

**Horizontal Position Accuracy (RMS)**

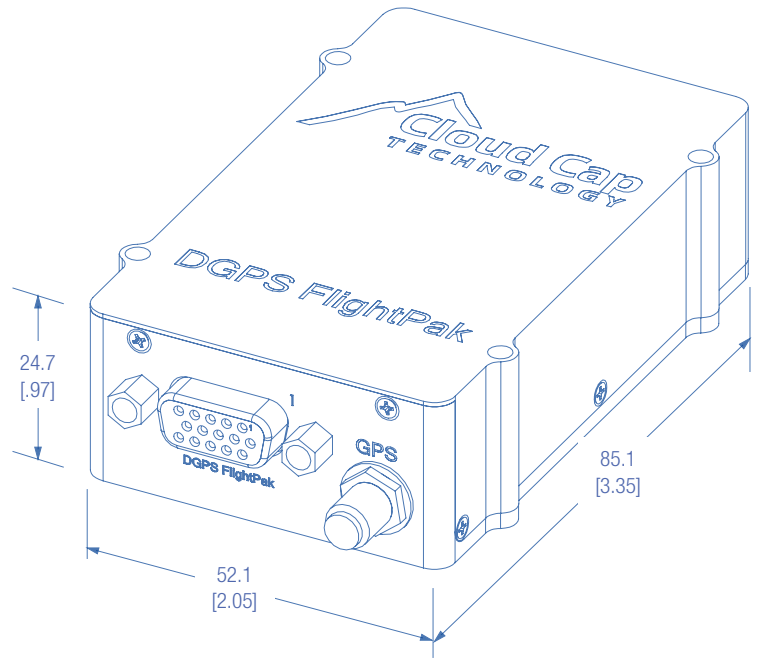
Single Point L1/L2: 1.2 m

SBAS<sup>2</sup>: 0.6 m

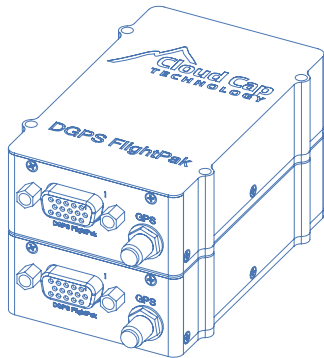
RT-2<sup>3</sup>: 1 cm + 1 ppm

**Vehicle Heading Accuracy**

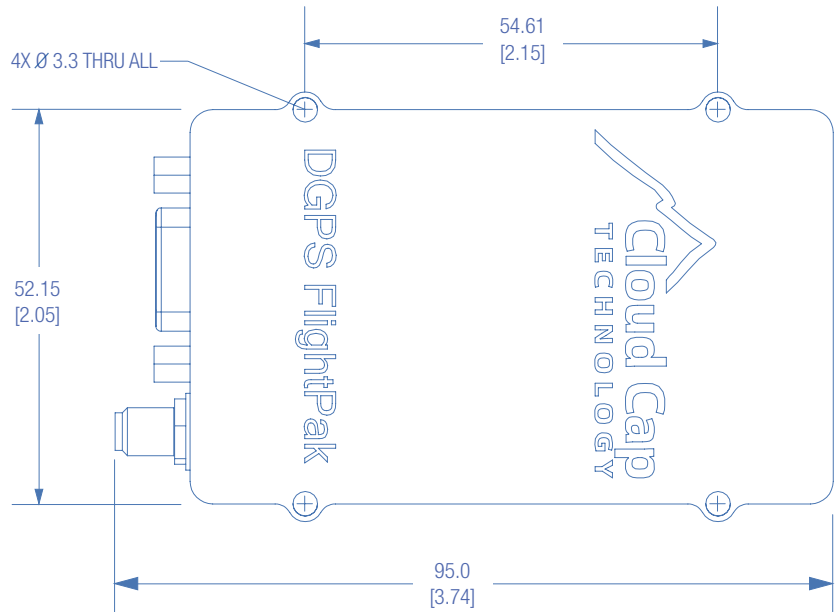
0.2° with 1m antenna separation



Dimensions in mm [inches]



<sup>1</sup>Optional ALIGN configuration allows users to take advantage of the faster relative position update rate (up to 20hz).



<sup>1</sup>User application software required

<sup>2</sup>GPS only

<sup>3</sup>RT-2 and ALIGN are registered trademark of NovAtel Inc.



**For additional information:**

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