

Enabling drones to populate our skies

VBN 1.0 AUTOPILOTS

VISUAL BASED NAVIGATION FOR UAV & EVTOL

Integrated visual navigation equipment for DAA and GNSS denied navigation.

Developed in compliance with DO178-C, DO254 and DO160-G aviation standards for UAV and eVTOL certification.

ADVANCED NAVIGATION SYSTEM



Stereoscopic computer vision for obstacle detection & characterization



GNSS DENIED NAVIGATION

SLAM processing for position triangulation in GNSS denied environments



UAM CERTIFICATION

Deterministic technologies and compliance with DO178C and DO254



MAIN FEATURES

| Positioning & attitude |
|---|
| Obstacle detection and identification |
| Dual camera for advanced performance |
| Embedded camera |
| DAA or GNSS denied modules |
| Designed to meet aircraft certification |
| |

DETECT AND AVOID

| Obstacle | Detection & recognition |
|-------------|--|
| Recognition | IA technology |
| Output | Size Speed Direction Position Identification |
| Postion | Relative or absolute |
| IFF | Identification Friend or Foe |
| Target | Moving or static object follow |

GNSS DENIED NAVIGATION

| Position | Absolute positioning |
|------------|----------------------|
| Altitude | AGL estimation |
| Attitude | Yaw, pitch & roll |
| Technology | SLAM |
| Maps | Not required |
| | |

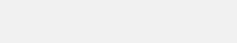
SAFETY & CERTIFICATION

| Software | D0178C |
|---------------|---|
| Hardware | D0254 |
| Environmental | DO160 |
| DAA | DO365B |
| Protections | ESD, overtemperature, short circuit, RP |
| Robust Manuf. | ATR, DDP & DoD ESS |

GENERAL

| I/O | CAN Bus RS232 RS485 |
|--------------|---|
| Conector | Circular rugged |
| Power Input | 6.5 - 36VDC 10W Redundant power input |
| Construction | Anodized aluminum IP67 |
| Temperature | -40 to 60°C |
| Weight | 110g |





[P005345] Veronte Autopilots: VBN 1.0 *Draft datasheet. Specifications may vary.





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